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110TH CONGRESS
1ST SESSION

H. R. 3236

[Report No. 110–304, Part I]

To promote greater energy efficiency.

IN THE HOUSE OF REPRESENTATIVES

JULY 31, 2007

Mr. BOUCHER (for himself and Mr. DINGELL) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Transportation and Infrastructure and Oversight and Government Reform, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

AUGUST 3, 2007

Reported from the Committee on Energy and Commerce

AUGUST 3, 2007

Committees on Transportation and Infrastructure and Oversight and Government Reform discharged; committed to the Committee of the Whole House on the State of the Union and ordered to be printed

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A BILL

To promote greater energy efficiency.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the ''Energy Efficiency Improvement Act of 2007''.

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

TITLE I—PROMOTING ENERGY EFFICIENCY

Subtitle A—Appliance Efficiency

SEC. 101. ENERGY STANDARDS FOR HOME APPLIANCES.

(a) APPLIANCES.—The Energy Policy and Conservation Act is amended as follows:

(1) DEHUMIDIFIERS.—Section 325(cc)(2) (42 U.S.C. 6295(cc)(2)) is amended to read as follows:

''(2) Dehumidifiers manufactured on or after October 1, 2012, shall have an Energy Factor that meets or exceeds the following values:

''Product Capacity (pints/day):	**Minimum Energy Factor (liters/KWh)**
Up to 35.00	1.35
35.01–45.00	1.50
45.01–54.00	1.60
54.01–75.00	1.70
Greater than 75.00	2.5''.

(2) RESIDENTIAL CLOTHESWASHERS AND RESIDENTIAL DISHWASHERS.—Section 325(g) (42 U.S.C. 6295(g)) is amended by adding at the end the following new paragraphs:

''(9) Clotheswashers manufactured on or after January 1, 2011, shall have—

''(A) a Modified Energy Factor of at least 1.26; and

''(B) a water factor of not more than 9.5.

''(10) No later than December 31, 2011, the Secretary shall publish a final rule determining whether to amend the standards in effect for clotheswashers manufactured on or after January 1, 2015. Such rule shall contain such amendment, if any.

''(11) Dishwashers manufactured on or after January 1, 2010, shall—

''(A) for standard size dishwashers not exceed 355 kwh/year and 6.5 gallon per cycle; and

''(B) for compact size dishwashers not exceed 260 kwh/year and 4.5 gallons per cycle.

''(12) No later than January 1, 2015, the Secretary shall publish a final rule determining whether to amend the standards for dishwashers manufactured on or after January 1, 2018. Such rule shall contain such amendment, if any.''.

(3) ENERGY CONSERVATION STANDARD.—Section 321(6)(A) (42 U.S.C. 6291(6)(A)) is amended by striking ''or, in the case of'' and inserting ''and, in the case of residential clotheswashers, residential dishwashers,''.

(4) REFRIGERATORS AND FREEZERS.—Section 325(b) (42 U.S.C. 6295(b)) is amended by adding at the end the following new paragraph:

''(4) Not later than December 31, 2010, the Secretary shall publish a final rule determining whether to amend the standards in effect for refrigerators, refrigerator-freezers, and freezers manufactured on or after January 1, 2014. Such rule shall contain such amendment, if any.''.

(b) ENERGY STAR.—Section 324A(d)(2) of the Energy Policy and Conservation Act (42 U.S.C. 6294a(d)(2)) is amended by striking ''January 1, 2010'' and inserting ''July 1, 2009''.

SEC. 102. ELECTRIC MOTOR EFFICIENCY STANDARDS.

(a) DEFINITIONS.—Section 340(13) of the Energy Policy and Conservation Act (42 U.S.C. 6311(13)) is amended—

(1) by redesignating subparagraphs (B) through (H) as subparagraphs (C) through (I), respectively; and

(2) by striking the text of subparagraph (A) and inserting the following: ''The term 'general purpose electric motor (subtype I)' means any motor that meets the definition of 'General Purpose' as established in the final rule issued by the Department of Energy for 'Energy Efficiency Program for Certain Commercial and Industrial Equipment: Test Procedures, Labeling, and Certification Require-

ments for Electric Motors' (10 C.F.R. 431), as in effect on the date of enactment of the [short title].

''(B) The term 'general purpose electric motor (subtype II)' means motors incorporating the design elements of a general purpose electric motor (subtype I) that are configured as one of the following:

''(i) U-Frame Motors.

''(ii) Design C Motors.

''(iii) Close-coupled pump motors.

''(iv) Footless motors.

''(v) Vertical solid shaft normal thrust motor (as tested in a horizontal configuration).

''(vi) 8-pole motors (~900 rpm).

''(vii) All poly-phase motors with voltages up to 600 volts other than 230/460 volts.''.

(b) STANDARDS.—Section 342(b) of the Energy Policy and Conservation Act (42 U.S.C. 6313(b)) is amended by striking the text of paragraph (1) and inserting the following: ''(A) Each general purpose electric motor (subtype I), except as provided in subparagraph (B), with a power rating of 1 horsepower or greater, but not greater than 200 horsepower, manufactured (alone or as a component of another piece of equipment) after the 36-month period beginning on the date of enactment of the [short

title], shall have a nominal full load efficiency not less than as defined in NEMA MG–1 (2006) table 12–12.

''(B) Each fire pump motor manufactured (alone or as a component of another piece of equipment) after the 36-month period beginning on the date of enactment of the [short title], shall have nominal full load efficiency not less than as defined in NEMA MG–1 (2006) table 12–11.

''(C) Each general purpose electric motor (subtype II) with a power rating of 1 horsepower or greater, but not greater than 200 horsepower, manufactured (alone or as a component of another piece of equipment) after the 36-month period beginning on the date of enactment of the [short title], shall have a nominal full load efficiency not less than as defined in NEMA MG–1 (2006) table 12–11.

''(D) Each NEMA Design B, general purpose electric motor with a power rating of more than 200 horsepower, but not greater than 500 horsepower, manufactured (alone or as a component of another piece of equipment) after the 36-month period beginning on the date of enactment of the [short title], shall have a nominal full load efficiency not less than as defined in NEMA MG–1 (2006) table 12–11.''.

SEC. 103. RESIDENTIAL BOILERS.

Section 325(f) of the Energy Policy and Conservation Act (42 U.S.C. 6925(f)) is amended—

(1) in the subsection heading, by inserting ''AND BOILERS'' after ''FURNACES'';

(2) in paragraph (1), by striking ''except that'' and all that follows through ''(B)'' and inserting ''except that'';

(3) by redesignating paragraph (3) as paragraph (4); and

(4) by inserting after paragraph (2) the following:

''(3) BOILERS.—

''(A) IN GENERAL.—Subject to subparagraph (B), boilers manufactured on or after September 1, 2012, shall meet the following requirements:

Boiler Type	Minimum Annual Fuel Utilization Efficiency	Design Requirements
Gas Hot Water	82%	No Constant Burning Pilot, Automatic Means for Adjusting Water Temperature
Gas Steam	80%	No Constant Burning Pilot
Oil Hot Water	84%	Automatic Means for Adjusting Temperature
Oil Steam	82%	None

Boiler Type	Minimum Annual Fuel Utilization Efficiency	Design Requirements
Electric Hot Water	None	Automatic Means for Adjusting Temperature
Electric Steam	None	None

''(B) AUTOMATIC MEANS FOR ADJUSTING WATER TEMPERATURE.—

''(i) IN GENERAL.—The manufacturer shall equip each gas, oil and electric hot water boiler, except boilers equipped with tankless domestic water heating coils, with automatic means for adjusting the temperature of the water supplied by the boiler to ensure that an incremental change in inferred heat load produces a corresponding incremental change in the temperature of water supplied.

''(ii) SINGLE INPUT RATE.—For a boiler that fires at one input rate this requirement may be satisfied by providing an automatic means that allows the burner or heating element to fire only when such means has determined that the inferred heat load cannot be met by the residual heat of the water in the system.

''(iii) NO INFERRED HEAT LOAD.—When there is no inferred heat load with respect to a hot water boiler, the automatic means described

in clause (i) and (ii) shall limit the temperature of the water in the boiler to not more than 140 degrees Fahrenheit.

''(iv) OPERATION.—A boiler described in clause (i) or (ii) shall be operable only when the automatic means described in clauses (i), (ii) and (iii) is installed.''.

SEC. 104. REGIONAL VARIATIONS IN HEATING OR COOLING STANDARDS.

(a) CONSUMER APPLIANCES.—Section 325(o) of the Energy Policy and Conservation Act (42 U.S.C. 6925(o)) is amended by adding at the end the following new paragraph:

''(6)(A) The Secretary may establish regional standards for space heating and air conditioning products, other than window-unit air-conditioners and portable space heaters. For each space heating and air conditioning product, the Secretary may establish a national minimum standard and two more stringent regional standards for regions determined to have significantly differing climatic conditions. Any standards set for any such region shall achieve the maximum level of energy savings that are technically feasible and economically justified within that region. As a preliminary step to determining the economic justifiability of establishing any such regional standard,

the Secretary shall conduct a study involving stakeholders, including but not limited to a representative from the National Institute of Standards and Technology; representatives of nongovernmental advocacy organizations; representatives of product manufacturers, distributors, and installers; representatives of the gas and electric utility industries; and such other individuals as the Secretary may designate. Such study shall determine the potential benefits and consequences of prescribing regional standards for heating and cooling products, and may, if favorable to such standards, constitute the evidence of economic justifiability required under this Act. Regional boundaries shall follow State borders and only include contiguous States (except Alaska and Hawaii), except that on the request of a State, the Secretary may divide that State to include a part of that State in each of two regions.

''(B) If the Secretary establishes regional standards, it shall be unlawful under section 332 to offer for sale at retail, sell at retail, or install noncomplying products except within the specified regions.

''(C)(i) Except as provided in clause (ii), no product manufactured to a regional standard established pursuant to subparagraph (A) shall be distributed in commerce without a prominent label affixed to the product which includes at the top of the label, in print of not less than

14-point type, the following: 'It is a violation of Federal law for this product to be installed in any State outside the region shaded on the map printed on this label.'. Below this notice shall appear a map of the United States with clearly defined State boundaries and names, and with all States in which the product meets or exceeds the standard established pursuant to subparagraph (A) shaded in a color or a manner as to be easily visible without obscuring the State boundaries and names. Below the map shall be printed on each label the following: 'It is a violation of Federal law for this label to be removed, except by the owner and legal resident of any single-family home in which this product is installed.'.

''(ii) A product manufactured that meets or exceeds all regional standards established under this paragraph shall bear a prominent label affixed to the product which includes at the top of the label, in print of not less than 14-point type the following: 'This product has achieved an energy efficiency rating under Federal law allowing its installation in any State.'.

''(D) Manufacturers of space heating and air conditioning equipment subject to regional standards established under this paragraph shall obtain and retain records on the intended installation locations of the equip-

ment sold, and shall make such records available to the Secretary on request.''.

(b) INDUSTRIAL EQUIPMENT.—Section 342(a) of the Energy Policy and Conservation Act (42 U.S.C. 6313(a)) is amended by adding at the end the following new paragraph:

''(10)(A) The Secretary may establish regional standards for space heating and air conditioning products subject to this subsection. For each space heating and air conditioning product, the Secretary may establish a national minimum standard and two more stringent regional standards for regions determined to have significantly differing climatic conditions. Any standards set for any such region shall achieve the maximum level of energy savings that are technically feasible and economically justified within that region. Regional boundaries shall follow State borders and only include contiguous States (except Alaska and Hawaii), except that on the request of a State, the Secretary may divide that State to include a part of that State in each of two regions.

''(B) If the Secretary establishes regional standards, it shall be unlawful under section 345 to offer for sale at retail, sell at retail, or install noncomplying products except within the specified regions.

''(C) Manufacturers of space heating and air conditioning equipment subject to regional standards established under this paragraph shall obtain and retain records on the intended installation locations of the equipment sold, and shall make such records available to the Secretary on request.''.

SEC. 105. PROCEDURE FOR PRESCRIBING NEW OR AMENDED STANDARDS.

Section 325(p) of the Energy Policy and Conservation Act (42 U.S.C. 6925(p)) is amended—

(1) by striking paragraph (1); and

(2) by redesignating paragraphs (2) through (4) as paragraphs (1) through (3), respectively.

SEC. 106. EXPEDITING APPLIANCE STANDARDS RULEMAKINGS.

(a) DIRECT FINAL RULE.—Section 325(p) of the Energy Policy and Conservation Act (42 U.S.C. 6295(p)) is amended by adding a new paragraph (5) as follows:

''(5) If manufacturers of any type (or class) of covered products or covered equipment, States, and efficiency advocates, or persons determined by the Secretary to fully represent such parties, submit to the Secretary a joint recommendation of an energy or water conservation standard and the Secretary determines that the recommended standard complies

with subsection (o) or section 342(a)(6)(B), as applicable, to that type (or class) of covered products or covered equipment to which the standard would apply, the Secretary may then issue a direct final rule including the standard recommended. If the Secretary determines that a direct final rule cannot be issued based on such a submitted joint recommendation, the Secretary shall publish a determination with an explanation as to why the joint recommendation does not comply with this paragraph. For purposes of this paragraph, the term 'direct final rule' means a final rule published the same day with a parallel notice of proposed rulemaking that proposes a new or amended energy or water conservation standard that is identical to the standard set forth in the final rule. There shall be a 110-day period for public comment with respect to the direct final rule. Not later than 10 days after the expiration of such 110-day period, the Secretary shall publish a notice responding to comments received with respect to the direct final rule. The Secretary shall withdraw a direct final rule promulgated pursuant to this paragraph within 120 days after publication in the Federal Register if the Secretary receives, with respect to the direct final rule, one or

more adverse public comments or any alternate joint recommendation and, based on the rulemaking record, the Secretary determines that such adverse comments or alternate joint recommendation may provide a reasonable basis for withdrawing the direct final rule under subsection (o), section 342(a)(6)(B), or any applicable law. In such a case, the Secretary shall then proceed with the parallel notice of proposed rulemaking, and shall identify in a notice published in the Federal Register the reasons for the withdrawal of the direct final rule. A direct final rule that is withdrawn in accordance with this paragraph shall not be considered final for purposes of subsection (o)(1) of this section. No person shall be found in violation of this part for noncompliance with a direct final rule that is withdrawn under this paragraph, if that person has complied with the applicable standard in effect under this part immediately prior to issuance of that direct final rule.''.

(b) CONFORMING AMENDMENT.—Section 345(b)(1) of the Energy Policy and Conservation Act (42 U.S.C. 6316(b)(1)) is amended by inserting after ''section'' the first time it appears ''325(p)(5), section''.

SEC. 107. CORRECTION OF LARGE AIR CONDITIONER RULE ISSUANCE CONSTRAINT.

(a) DEFINITIONS.—Section 340 of the Energy Policy and Conservation Act (42 U.S.C. 6311) is amended by adding the following new paragraphs at the end:

''(22) The term 'single package vertical air conditioner' means air-cooled commercial package air conditioning and heating equipment; factory assembled as a single package having its major components arranged vertically, which is an encased combination of cooling and optional heating components, is intended for exterior mounting on, adjacent interior to, or through an outside wall; and is powered by a single- or three-phase current. It may contain separate indoor grille(s), outdoor louvers, various ventilation options, indoor free air discharge, duct-work, well plenum, or sleeve. Heating components may include electrical resistance, steam, hot water, or gas, but may not include reverse cycle refrigeration as a heating means.

''(23) The term 'single package vertical heat pump' means a single package vertical air conditioner that utilizes reverse cycle refrigeration as its primary heat source, that may include secondary supplemental heating by means of electrical resistance, steam, hot water, or gas.''.

(b) STANDARDS.—Section 342(a) of the Energy Policy and Conservation Act (42 U.S.C. 6313(a)) is amended—

(1) in each of paragraphs (1) and (2), by inserting after ''heating equipment'' in the first sentence '', including single package vertical air conditioners and single package vertical heat pumps,'';

(2) in paragraph (1), by striking ''but before January 1, 2010,'';

(3) in paragraph (6)(A)(i), by striking ''January 1, 2010,'' and inserting ''October 24, 1992'';

(4) in paragraph (6)(A)(ii)—

(A) by striking ''5'' and inserting ''2''; and

(B) by striking ''the effective date of a standard'' and inserting ''January 10, 2010, or beginning on the effective date of the most recent revision made under clause (i) of this subparagraph,''; and

(C) by adding the following new clause at the end:

''(iii) The Secretary may only initiate a rulemaking under clause (ii) of this subparagraph for a particular product so long as any standard established under a previous rulemaking with respect to that product has become effective.'';

(5) in each of paragraphs (7), (8), and (9), by inserting after ''heating equipment'' in the first sentence '', excluding single package vertical air conditioners and single package vertical heat pumps,'';

(6) in paragraph (7)—

(A) by striking ''manufactured on or after January 1, 2010'';

(B) in each of subparagraphs (A), (B), and (C), by adding at the beginning ''For equipment manufactured on or after January 1, 2010,''; and

(C) by adding at the end the following new subparagraphs:

''(D) For equipment manufactured on or after the later of January 1, 2008, or the date six months after enactment of this section, the minimum seasonal energy efficiency ratio of air-cooled three-phase electric central air conditioners and central air conditioning heat pumps less than 65,000 Btu per hour (cooling capacity), split systems, shall be 13.0.

''(E) For equipment manufactured on or after the later of January 1, 2008, or the date six months after enactment of this section, minimum seasonal energy efficiency ratio of air-cooled three-phase electric central air conditioners and central air condi-

tioning heat pumps less than 65,000 Btu per hour (cooling capacity), single package, shall be 13.0.

''(F) For equipment manufactured on or after the later of January 1, 2008, or the date six months after enactment of this section, minimum heating seasonal performance factor of air-cooled three-phase electric central air conditioning heat pumps less than 65,000 Btu per hour (cooling capacity), split systems, shall be 7.7.

''(G) For equipment manufactured on or after the later of January 1, 2008, or the date six months after enactment of this section, the minimum heating seasonal performance factor of air-cooled three-phase electric central air conditioning heat pumps less than 65,000 Btu per hour (cooling capacity), single package, shall be 7.7.''; and

(7) by adding the following new paragraphs at the end:

''(10) Single package vertical air conditioners and single package vertical heat pumps manufactured on or after January 1, 2010, shall meet the following standards:

''(A) The minimum energy efficiency ratio of single package vertical air conditioners less than 65,000 Btu per hour (cooling capacity), single-phase, shall be 9.0.

''(B) The minimum energy efficiency ratio of single package vertical air conditioners less than 65,000 Btu per hour (cooling capacity), three-phase, shall be 9.0.

''(C) The minimum energy efficiency ratio of single package vertical air conditioners at or above 65,000 Btu per hour (cooling capacity) but less than 135,000 Btu per hour (cooling capacity), shall be 8.9.

''(D) The minimum energy efficiency ratio of single package vertical air conditioners at or above 135,000 Btu per hour (cooling capacity) but less than 240,000 Btu per hour (cooling capacity), shall be 8.6.

''(E) The minimum energy efficiency ratio of single package vertical heat pumps less than 65,000 Btu per hour (cooling capacity), single-phase, shall be 9.0; and the minimum coefficient of performance in the heating mode shall be 3.0.

''(F) The minimum energy efficiency ratio of single package vertical heat pumps less than 65,000 Btu per hour (cooling capacity), three-phase, shall be 9.0; and the minimum coefficient of performance in the heating mode shall be 3.0.

''(G) The minimum energy efficiency ratio of single package vertical heat pumps at or above 65,000 Btu per hour (cooling capacity) but less than 135,000 Btu per hour (cooling capacity), shall be 8.9; and the minimum coefficient of performance in the heating mode shall be 3.0.

''(H) The minimum energy efficiency ratio of single package vertical heat pumps at or above 135,000 Btu per hour (cooling capacity) but less than 240,000 Btu per hour (cooling capacity), shall be 8.6; and the minimum coefficient of performance in the heating mode shall be 2.9.

''(11) Not later than 36 months after the date of enactment of this paragraph, the Secretary shall review the most recently published ASHRAE/IES Standard 90.1 with respect to single package vertical air conditioners and single package vertical heat pumps according to the procedures established in paragraph (6).''.

SEC. 108. DEFINITION OF ENERGY CONSERVATION STANDARD.

Section 321 of the Energy Policy and Conservation Act (42 U.S.C. 6291) is amended by striking paragraph (6) and inserting the following:

''(6) ENERGY CONSERVATION STANDARD.—

''(A) IN GENERAL.—The term 'energy conservation standard' means 1 or more performance standards that—

''(i) for covered products (excluding clothes washers, dishwashers, showerheads, faucets, water closets, and urinals), prescribe a minimum level of energy efficiency or a maximum quantity of energy use, determined in accordance with test procedures prescribed under section 323;

''(ii) for showerheads, faucets, water closets, and urinals, prescribe a minimum level of water efficiency or a maximum quantity of water use, determined in accordance with test procedures prescribed under section 323; and

''(iii) for clothes washers and dishwashers—

''(I) prescribe a minimum level of energy efficiency or a maximum quantity of energy use, determined in accordance with test procedures prescribed under section 323; and

''(II) may include a minimum level of water efficiency or a maximum

quantity of water use, determined in accordance with those test procedures.

"(B) INCLUSIONS.—The term 'energy conservation standard' includes—

"(i) 1 or more design requirements, if the requirements were established—

"(I) on or before the date of enactment of this subclause; or

"(II) as part of a consensus agreement under section 325(hh); and

"(ii) any other requirements that the Secretary may prescribe under section 325(r).

"(C) EXCLUSION.—The term 'energy conservation standard' does not include a performance standard for a component of a finished covered product, unless regulation of the component is authorized or established pursuant to this title.".

SEC. 109. IMPROVING SCHEDULE FOR STANDARDS UPDATING AND CLARIFYING STATE AUTHORITY.

(a) CONSUMER APPLIANCES.—Section 325(m) of the Energy Policy and Conservation Act (42 U.S.C. 6295(m)) is amended to read as follows:

''(m) FURTHER RULEMAKING.—(1) Not later than 6 years after issuance of any final rule establishing or amending a standard, as required for a product under this part, the Secretary shall publish either—

''(A) a notice of the Secretary's determination that standards for that product do not need to be amended, based on the criteria in subsection (n)(2); or

''(B) a notice of proposed rulemaking including new proposed standards based on the criteria in subsection (o) and the procedures in subsection (p).

In either case, the Secretary shall also publish a notice stating that the Department's analysis is publicly available, and provide opportunity for written comment.

''(2) Not later than 2 years after a notice is issued under paragraph (1)(B), the Secretary shall publish a final rule amending the standard for the product. Not later than 3 years after a determination under paragraph (1)(A), the Secretary shall make a new determination and publication under paragraph (1)(A) or (B).

''(3) An amendment prescribed under this subsection shall apply to products manufactured after a date which is 3 years after publication of the final rule establishing a standard, except that a manufacturer shall not be required to apply new standards to a product with respect

to which other new standards have been required within the prior 6 years.

''(4) The Secretary shall promptly submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate—

''(A) a progress report every 180 days on compliance with this section, including a specific plan to remedy any failures to comply with deadlines for action set forth in this section; and

''(B) all required reports to the Court or to any party to the Consent Decree in State of New York v. Bodman, Consolidated Civil Actions No. 05 Civ. 7807 and No. 05 Civ. 7808.''.

(b) INDUSTRIAL EQUIPMENT.—Section 342(a)(6) of the Energy Policy and Conservation Act (42 U.S.C. 6313(a)(6)) is amended—

(1) by redesignating subparagraph (C) as subparagraph (D); and

(2) by amending the remainder of the paragraph to read as follows:

''(6)(A) If ASHRAE/IES Standard 90.1 is amended with respect to any small, large, or very large commercial package air conditioning and heating equipment, packaged terminal air conditioners,

packaged terminal heat pumps, warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, or unfired hot water storage tanks, the Secretary shall within 6 months publish in the Federal Register for public comment an analysis of the energy savings potential of the amended energy efficiency standards. The Secretary shall establish an amended uniform national standard for that product at the minimum level for each effective date specified in the amended ASHRAE/IES Standard 90.1 within 18 months of the ASHRAE amendment's publication, unless the Secretary determines, by rule published in the Federal Register, and supported by clear and convincing evidence, that adoption of a uniform national standard more stringent than such amended ASHRAE/IES Standard 90.1 for such product would result in significant additional conservation of energy and is technologically feasible and economically justified.

''(B) If the Secretary issues a rule containing such a determination, the rule shall establish such amended standard, and shall be issued within 30 months of the ASHRAE amendment's publication.

''(C)(i) Not later than 6 years after issuance of any final rule establishing or amending a standard,

as required for a product under this part, the Secretary shall publish either—

"(I) a notice of the Secretary's determination that standards for that product do not need to be amended, based on the criteria in subparagraph (A); or

"(II) a notice of proposed rulemaking including new proposed standards based on the criteria and procedures in subparagraph (B).

In either case, the Secretary shall also publish a notice stating that the Department's analysis is publicly available, and provide opportunity for written comment.

"(ii) Not later than 2 years after a notice is issued under clause (i)(II), the Secretary shall publish a final rule amending the standard for the product. Not later than 3 years after a determination under clause (i)(I), the Secretary shall make a new determination and publication under clause (i)(I) or (II).

"(iii) An amendment prescribed under this subparagraph shall apply to products manufactured after a date which is 3 years after publication of the final rule establishing a standard, except that a manufacturer shall not be re-

quired to apply new standards to a product with respect to which other new standards have been required within the prior 6 years.

''(iv) The Secretary shall promptly submit to the House Committee on Energy and Commerce and to the Senate Committee on Energy and Natural Resources a progress report every 180 days on compliance with this paragraph, including a specific plan to remedy any failures to comply with deadlines for action set forth in this paragraph.''.

SEC. 110. UPDATING APPLIANCE TEST PROCEDURES.

(a) CONSUMER APPLIANCES.—Section 323(b)(1)(A) of the Energy Policy and Conservation Act (42 U.S.C. 6923(b)(1)(A)) is amended by striking ''The Secretary may'' and all that follows through ''paragraph (3)'' and inserting ''At least every 7 years the Secretary shall review test procedures for all covered products and shall—

''(i) amend test procedures with respect to any covered product if the Secretary determines that amended test procedures would more accurately or fully comply with the requirements of paragraph (3); or

''(ii) publish notice in the Federal Register of any determination not to amend a test procedure''.

(b) INDUSTRIAL EQUIPMENT.—Section 343(a)(1) of the Energy Policy and Conservation Act (42 U.S.C. 6314(a)(1)) is amended by striking ''The Secretary may'' and all that follows through ''this section'' and inserting ''At least every 7 years the Secretary shall conduct an evaluation of each class of covered equipment and—

''(B) if the Secretary determines that amended test procedures would more accurately or fully comply with the requirements of paragraphs (2) and (3), shall prescribe test procedures for such class in accordance with the provisions of this section; or

''(C) shall publish notice in the Federal Register of any determination not to amend a test procedure''.

SEC. 111. FURNACE FAN STANDARD PROCESS.

Section 325(f)(3)(D) of the Energy Policy and Conservation Act (42 U.S.C. 6295(f)(3)(D)) is amended—

(1) by striking ''may'' and inserting ''shall''; and

(2) by inserting ''not later than July 1, 2013'' after ''duct work''.

SEC. 112. TECHNICAL CORRECTIONS.

(a) Section 135(a)(1)(A)(ii) of the Energy Policy Act of 2005 (Public Law 109–58) is amended by striking ''C78.1–1978(R1984)'' and inserting ''C78.3–1978(R1984)''.

(b) Section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295) (as amended by section 135(c)(4) of the Energy Policy Act of 2005) is amended—

(1) in subsection (v)—

(A) in the subsection heading, by striking ''CEILING FANS AND'';

(B) by striking paragraph (1); and

(C) by redesignating paragraphs (2) through (4) as paragraphs (1) through (3), respectively; and

(2) in subsection (ff)—

(A) in paragraph (1)(A)—

(i) by striking clause (iii);

(ii) by redesignating clause (iv) as clause (iii); and

(iii) in clause (iii)(II) (as so redesignated), by inserting ''fans sold for'' before ''outdoor''; and

(B) in paragraph (4)(C)—

(i) in the matter preceding clause (i), by striking ''subparagraph (B)'' and inserting ''subparagraph (A)'';

(ii) by striking clause (ii) and inserting the following:

''(ii) shall be packaged with lamps to fill all sockets.'';

(C) in paragraph (6), by redesignating subparagraphs (C) and (D) as clauses (i) and (ii), respectively, of subparagraph (B); and

(D) in paragraph (7), by striking ''327'' the second place it appears and inserting ''324''.

SEC. 113. ENERGY EFFICIENT STANDBY POWER DEVICES.

(a) DEFINITIONS.—In this section:

(1) AGENCY.—

(A) IN GENERAL.—The term ''agency'' has the meaning given the term ''Executive agency'' in section 105 of title 5, United States Code.

(B) INCLUSIONS.—The term ''agency'' includes military departments, as the term is defined in section 102 of title 5, United States Code.

(2) ELIGIBLE PRODUCT.—The term ''eligible product'' means a commercially available, off-the-shelf product that—

(A)(i) uses external standby power devices; or

(ii) contains an internal standby power function; and

(B) is included on the list compiled under subsection (d).

(b) FEDERAL PURCHASING REQUIREMENT.—Subject to subsection (c), if an agency purchases an eligible product, the agency shall purchase—

(1) an eligible product that uses not more than 1 watt in the standby power consuming mode of the eligible product; or

(2) if an eligible product described in paragraph (1) is not available, the eligible product with the lowest available standby power wattage in the standby power consuming mode of the eligible product.

(c) LIMITATION.—The requirements of subsection (b) shall apply to a purchase by an agency only if—

(1) the lower-wattage eligible product is—

(A) lifecycle cost-effective; and

(B) practicable; and

(2) the utility and performance of the eligible product is not compromised by the lower wattage requirement.

(d) ELIGIBLE PRODUCTS.—The Secretary of Energy, in consultation with the Secretary of Defense and the Administrator of General Services, shall compile a list of cost-effective eligible products that shall be subject to the purchasing requirements of subsection (b).

SEC. 114. EXTERNAL POWER SUPPLY EFFICIENCY STANDARDS.

(a) Section 321 of the Energy Policy and Conservation Act (42 U.S.C. 6291) is amended—

(1) in paragraph (36) by inserting ''(A)'' before the text and adding at the end the following:

''(B) The term 'class A external power supply' means a device that—

''(i) is designed to convert line voltage AC input into lower voltage AC or DC output;

''(ii) is able to convert to only one AC or DC output voltage at a time;

''(iii) is sold with, or intended to be used with, a separate end-use product that constitutes the primary load;

''(iv) is contained in a separate physical enclosure from the end-use product;

''(v) is connected to the end-use product via a removable or hard-wired male/female electrical connection, cable, cord or other wiring; and

''(vi) has nameplate output power less than or equal to 250 watts.

''(C) The term 'class A external power supply' does not include any device that—

''(i) requires Federal Food and Drug Administration listing and approval as a medical device, as described under section 513 of the Food, Drug, and Cosmetic Act of 1938; or

''(ii) powers the charger of a detachable battery pack or charges the battery of a product that is fully or primarily motor operated.

''(D) The term 'active mode' means the mode of operation when an external power supply is connected to the main electricity supply and the output is connected to a load.

''(E) The term 'no-load mode' means the mode of operation when an external power supply is connected to the main electricity supply and the output is not connected to a load.''

(2) by adding at the end the following:

''(52) The term 'detachable battery' means a battery that is contained in a separate enclosure from the product and is intended to be removed or disconnected from the product for recharging.''.

(b) Section 323 of the Energy Policy and Conservation Act (42 U.S.C. 6293) is amended in subsection (b) by adding at the end the following:

''(16) Test procedures for class A external power supplies shall be based upon the U.S. Environmental Protection Agency's 'Test Method for Calculating the Energy Efficiency of Single-Voltage External AC–DC and AC–AC Power Supplies', August 11, 2004, provided that the test voltage specified in section 4(d) of such test method shall be only 115 volts, 60 Hz.''.

(c) Section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295) is amended in subsection (u) by adding at the end the following:

''(6) EFFICIENCY STANDARDS FOR CLASS A EXTERNAL POWER SUPPLIES.—

''(A) Class A external power supplies manufactured on or after July 1, 2008 (or the date of enactment of this paragraph, if later) shall meet the following standards:

"Active Mode	
"Nameplate Output	**RequiredEfficiency (decimal equivalent of apercentage)**
Less than 1 watt	0.5 times the NameplateOutput
From 1 watt to not more than 51 watts	The sum of 0.09 times the Natural Logarithm of theNameplate Output and 0.5
Greater than 51 watts	0.85
"No-Load Mode	
"Nameplate Output	**Maximum Consumption**
Not more than 250 watts	0.5watts

''(B) Notwithstanding paragraph (A), any class A external power supply manufactured on or after July 1, 2008, and before July 1, 2015, and made available by the manufacturer as a service part or a spare part for an end-use product—

''(i) that constitutes the primary load; and

''(ii) was manufactured before July 1, 2008,

shall not be subject to the requirements of paragraph (A).

''(C) Any class A external power supply manufactured on or after July 1, 2008 (or the date of enactment of this paragraph, if later) shall be clearly and permanently marked in accordance with the External Power Supply International Efficiency Marking Protocol, as referenced in the 'Energy Star Program Requirements for Single Voltage External AC–DC and AC–AC Power Supplies, version 1.1' published by the Environmental Protection Agency.

''(D)(i) Not later than July 1, 2011 the Secretary shall publish a final rule to determine whether the standards established under para-

graph (A) should be amended. Such rule shall provide that any amended standard shall apply to products manufactured on or after July 1, 2013.

''(ii) Not later than July 1, 2015 the Secretary shall publish a final rule to determine whether the standards established under paragraph (A) should be amended. Such rule shall provide that any amended standard shall apply to products manufactured on or after July 1, 2017.

''(7) An energy conservation standard for external power supplies shall not constitute an energy conservation standard for the separate end-use product to which it is connected.''.

SEC. 115. STANDBY MODE.

(a) CONSUMER APPLIANCE REQUIREMENT.—Section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295) is amended by adding at the end the following new subsection:

''(ii) STANDBY MODE.—

''(1) REQUIREMENT.—Except as provided in paragraph (2), any final rule adopted after July 1, 2012, to set a new or revised energy efficiency standard for a covered product shall specify that a

covered product manufactured on or after the effective date of such new or revised standard shall, when in standby mode, operate with not more than 1 watt of electric power.

''(2) EXCEPTIONS.—

''(A) EXTENSIONS.—The Secretary may provide a single extension of up to 2 years for compliance with paragraph (1) with respect to a covered product if the Secretary finds that such extension is appropriate.

''(B) EXEMPTIONS.—The Secretary may provide an exemption from the requirement under paragraph (1) for a covered product, after public notice and opportunity for comment, if the Secretary finds that—

''(i) achieving the requirement is not technologically feasible and economically justified for that covered product; or

''(ii) such an exemption is warranted for medical or military reasons.

Any exemption provided under this subparagraph shall be reviewed at least once every 5 years.''.

(b) CONSUMER APPLIANCE TEST PROCEDURES.—Section 323(b) of the Energy Policy and Conservation Act

(42 U.S.C. 6293(b)) is amended by adding at the end the following new paragraph:

''(17) Not later than July 1, 2009, the Secretary shall issue a final rule establishing test procedures for standby power consumption for all covered products, except for products for which the current test procedure already measures standby power consumption.''.

(c) REPEAL.—

(1) IN GENERAL.—Section 325(u) of the Energy Policy and Conservation Act (42 U.S.C. 6295(u)) is amended—

(A) by striking paragraph (2); and

(B) by redesignating paragraphs (3) through (5) as paragraphs (2) through (4), respectively.

(2) EFFECTIVE DATE.—The amendments made by paragraph (1) shall take effect on the date described in section 325(ii)(I) of the Energy Policy and Conservation Act as, added by subsection (a) of this section.

(d) INDUSTRIAL EQUIPMENT REQUIREMENT.—Section 342 of the Energy Policy and Conservation Act (42 U.S.C. 6313) is amended by adding at the end the following new subsection:

''(f) STANDBY POWER.—

''(1) REQUIREMENT.—Except as provided in paragraph (2), any final rule adopted after July 1, 2012, to set a new or revised energy efficiency standard for covered equipment shall specify that covered equipment manufactured on or after the effective date of such new or revised standard shall, when in standby mode, operate with not more than 1 watt of electric power.

''(2) EXCEPTIONS.—

''(A) EXTENSIONS.—The Secretary may provide a single extension of up to 5 years for compliance with paragraph (1) with respect to a covered equipment if the Secretary finds that such extension is appropriate.

''(B) EXEMPTIONS.—The Secretary may provide an exemption from the requirement under paragraph (1) for covered equipment, after public notice and opportunity for comment, if the Secretary finds that—

''(i) achieving the requirement is not technologically feasible and economically justified for that covered equipment; or

''(ii) such an exemption is warranted for medical or military reasons.

Any exemption provided under this subparagraph shall be reviewed at least once every 5 years.''.

(e) INDUSTRIAL EQUIPMENT TEST PROCEDURES.—Section 343(a) of the Energy Policy and Conservation Act (42 U.S.C. 6314(a)) is amended by adding at the end the following new paragraph:

''(9) Not later than July 1, 2009, the Secretary shall issue a final rule establishing test procedures for standby power consumption for all covered equipment, except for equipment for which the current test procedure already measures standby power consumption.''.

Subtitle B—Lighting Efficiency

SEC. 121. EFFICIENT LIGHT BULBS.

(a) PROHIBITION.—

(1) REGULATIONS.—Not later than 1 year after the date of enactment of this Act, the Secretary of Energy shall issue regulations—

(A) prohibiting the sale of 100 watt general service incandescent lamps after January 1, 2012, unless those lamps emit at least 60 lumens per watt;

(B) prohibiting the sale of general service lamps manufactured after the effective dates shown in the table below that do not meet the

minimum efficacy levels (lumens/watt) shown in the following table:

Minimum Efficacy Levels and Effective Dates

Lumen Range (Lumens)	Minimum Efficacy (Lumens/ Watt)	Effective Dates
200–449	15	1/1/2014
450–699	17	1/1/2014
700–999	20	1/1/2013
1000–1500	22	1/1/2012
1501–3000	24	1/1/2012

(C) after January 1, 2020, prohibiting the sale of general service lamps that emit less than 300 percent of the average lumens per watt emitted by 100 watt incandescent general service lamps that are commercially available as of the date of enactment of this Act;

(D) establishing a minimum color rendering index (CRI) of 80 or higher for all general service lamps manufactured as of the effective dates in subparagraph (B); and

(E) prohibiting the manufacture or import for sale in the United States of an adapter device designed to allow a lamp with a different base to fit into a medium screw base socket manufactured after January 1, 2009.

(2) EXEMPTIONS.—The regulations issued under paragraph (1) shall include procedures for the Secretary to exempt specialty lamps from the requirements of paragraph (1). The Secretary may provide such an exemption only in cases where the Secretary finds, after a hearing and opportunity for public comment, that it is not technically feasible to serve a specialized lighting application, such as a military, medical, public safety application, or in certified historic lighting applications using bulbs that meet the requirements of paragraph (1). In addition, the Secretary shall include as an additional criterion that exempted products are unlikely to be used in the general service lighting applications.

(3) ADDITIONAL LAMPS TYPES.—

(A) Manufacturers of rough service, vibration service, vibration resistant, appliance, shatter resistant, and three-way lamps shall report annual sales volume to the Secretary. If the Secretary determines that annual sales volume for any of these lamp types increases by 100 percent relative to 2009 sales in any later year, then such lamps shall by subject to the following standards:

(i) Appliance lamps shall use no more than 40 watts.

(ii) Rough service lamps shall use no more than 40 watts.

(iii) Vibration service and vibration resistant lamps shall use no more than 40 watts.

(iv) Three-way lamps shall comply with the standards in paragraph (1) at each level of rated lumen output.

(B) Rough service, vibration service, vibration resistant, appliance, shatter resistant, and three-way lamps shall be available for sale at retail in single packs only.

(4) CIVIL PENALTY.—The Secretary of Energy shall include in regulations under this subsection a schedule of appropriate civil penalties for violations of the prohibitions under this subsection. Such penalties shall be in an amount sufficient to ensure compliance with this section.

(5) STATE PREEMPTION.—State standards for general service lamps are preempted as of the date of enactment of this Act, except—

(A) any State standard already enacted or adopted as of the date of enactment of this Act

may be enforced until the Federal effective dates for each lamp category, and such States may modify existing State standards for general service lamps to conform with the standards in paragraph (1) at any time;

(B) any State standard identical to the standards in paragraph (1)(B) with an effective date no sooner than January 1, 2015; and

(C) any State standard identical to Federal standards, after such Federal standards are in effect.

(6) DEFINITIONS.—For purposes of this section, the following definitions apply:

(A) The term ''general service lamp'' means a nonreflectorized lamp that—

(i) is intended for general service applications;

(ii) has a medium screw base;

(iii) has an initial lumen output no less than 200 lumens and no more than 3000 lumens;

(iv) has an input voltage range at least partially within 110 and 130 volts;

(v) has a A–15, A–19, A–21, A–23, A–25, PS–25, PS–30, BT–14.5, BT–15,

CP–19, TB–19, CA–22, or similar shape as defined in ANSI C78.20–2003; and

(vi) has a bulb finish of the frosted, clear, soft white, modified spectrum, enhanced spectrum, full spectrum, or equivalent type.

The following incandescent lamps are not general service lamps: appliance, black light, bug, colored, infrared, left-hand thread, marine, marine signal service, mine service, plant light, reflector, rough service, shatter resistant, sign service, silver bowl, three-way, traffic signal, and vibration service or vibration resistant.

(B) The term ''appliance lamp'' means any lamp specifically designed to operate in a household appliance. Examples of appliance lamps include oven lamps, refrigerator lamps, and vacuum cleaner lamps.

(C) The term ''black light lamp'' means a lamp that emits radiant energy in the UV–A band (315–400 nm) and is designated and marketed as a ''black light''.

(D) The term ''bug lamp'' means a lamp that contains a filter to suppress the blue and

green portions of the visible spectrum and is designated and marketed as a ''bug light''.

(E) The term ''colored incandescent lamp'' means an incandescent lamp designated and marketed as a colored lamp that has a CRI of less than 50, as determined according to the test method given in CIE publication 13.2, and has a correlated color temperature less than 2,500K, or greater than 4,600K, where correlated color temperature is defined as the absolute temperature of a blackbody whose chromaticity nearly resembles that of the light source.

(F) The term ''infrared lamp'' means a lamp that radiates predominately in the infrared region of the electromagnetic spectrum, and where visible radiation is not of principal interest.

(G) The term ''lamp'' means an electrical appliance that includes a glass envelope and produces optical radiation for the purpose of visual illumination, designed to be installed into a luminaire by means of an integral lamp-holder. Types of lamps include incandescent, fluo-

rescent, and high intensity discharge (high pressure sodium and metal halide).

(H) The term ''left-handed thread lamp'' means a lamp on which the base screws into a lamp socket in a counter-clockwise direction, and screws out of a lamp socket in a clockwise direction.

(I) The term ''marine lamp'' means a lamp specifically designed and marketed to operate in a marine application.

(J) The term ''marine signal service lamp'' means a lamp specifically designed to provide signals to marine vessels for seaway safety.

(K) The term ''mine service lamp'' means a lamp specifically designed and marketed for use in mine applications.

(L) The term ''plant light lamp'' means a lamp that contains a filter to suppress yellow and green portions of the spectrum and is designated and marketed as a ''plant light''.

(M) The term ''rough service lamp'' means a lamp that has a minimum of 5 supports with filament configurations similar to but not limited to C7A, C11, C17, and C22 as listed in Figure 6–12 of the 9th edition of the IESNA

Lighting handbook, where lead wires are not counted as supports and that is designated and marketed specifically for ''rough service'' applications.

(N) The term ''shatter resistant lamp'' means a lamp with an external coating on the bulb wall to resist breakage and which is designated and marketed as a shatter resistant lamp.

(O) The term ''showcase lamp'' means a lamp that has a tubular bulb with a conventional screw base and which is designated and marketed as a showcase lamp.

(P) The term ''sign service lamp'' means a lamp of the vacuum type or gas-filled with sufficiently low bulb temperature to permit exposed outdoor use on high-speed flashing circuits. The designation shall be on the lamp packaging, and marketing materials shall identify the lamp as being a sign service lamp.

(Q) The term ''silver bowl lamp'' means a lamp that has a reflective coating applied directly to part of the bulb surface and that reflects light in a backward direction toward the lamp base. The designation shall be on the

lamp packaging, and marketing materials shall identify the lamp as being a silver bowl lamp or similar designation.

(R) The term ''three-way lamp'' means a lamp that employs two filaments, operated separately and in combination, to provide three light levels. The designation shall be on the lamp packaging, and marketing materials shall identify the lamp as being a three-way lamp.

(S) The term ''traffic signal lamp'' means a lamp that is designed with lifetime, wattage, focal length, filament configuration, mounting, lamp glass, and lamp base characteristics appropriate for use in traffic signals.

(T) The term ''vibration service lamp'' or ''vibration resistant lamp'' means a lamp with filament configurations similar to but not limited to C–5, C–7A, or C–9, as listed in Figure 6–12 of the 9th Edition of the IESNA Lighting Handbook. The lamp is designated and marketed specifically for vibration service or vibration resistant applications. The designation shall be on the lamp packaging, and marketing materials shall identify the lamp as being vibration resistant or vibration service.

(b) INCENTIVE PLAN AND PUBLIC EDUCATION.—

(1) INCENTIVE PLAN.—Not later than 6 months after the date of enactment of this Act, the Secretary of Energy shall transmit to the Congress a plan for encouraging and providing incentives for the domestic production of light bulbs by United States manufacturers that meet the efficacy levels shown in the table in subsection (a)(1)(B).

(2) LABELING RULEMAKING.—The Federal Trade Commission shall conduct a rulemaking to consider the effectiveness of current lamp labeling requirements and to consider alternative labeling approaches that will help consumers to understand new high-efficiency lamp products. Such labeling shall include, at a minimum, information on lighting output (lumens), input power (watts), efficiency (lumens per watt), lamp rated lifetime (hours), annual or lifetime energy operating cost, and any hazardous materials (such as mercury) that may be contained in lamp products. The Federal Trade Commission shall complete this rulemaking within one year after the date of enactment of this Act.

(3) NATIONAL SALES DATA TRACKING SYSTEM.—The Secretary of Energy shall develop and implement within one year after the date of enact-

ment of this Act a national sales data tracking system in conjunction with the National Electrical Manufacturers Association and other stakeholders for lamp technologies, including Light Emitting Diodes, halogens, incandescents, and compact fluorescent lamps.

(c) REPORT ON MERCURY USE AND RELEASE.—Not later than 1 year after the date of enactment of this Act, the Secretary of Energy, in cooperation with the Administrator of the Environmental Protection Agency, shall submit to Congress a report describing recommendations relating to the means by which the Federal Government may reduce or prevent the release of mercury during the manufacture, transportation, storage, or disposal of general service lamps.

SEC. 122. INCANDESCENT REFLECTOR LAMPS.

(a) DEFINITIONS.—Section 321 of the Energy Policy and Conservation Act (42 U.S.C. 6291) is amended—

(1) in paragraph (30)(C)(ii)—

(A) in the matter preceding subclause (I)—

(i) by striking ''or similar bulb shapes (excluding ER or BR)'' and inserting ''ER, BR, BPAR, or similar bulb shapes''; and

(ii) by striking ''2.75'' and inserting ''2.25''; and

(B) by striking ''is either—'' and all that follows through subclause (II) and inserting ''has a rated wattage that is greater than 40 watts.''; and

(2) by adding at the end the following:

''(52) The term 'BPAR incandescent reflector lamp' means a reflector lamp as shown in figure C78.21–278 on page 32 of ANSI C78.21–2003.

''(53)(A) The term 'BR incandescent reflector lamp' means a reflector lamp that has—

''(i) a bulged section below the major diameter of the bulb and above the approximate baseline of the bulb, as shown in figure 1 (RB) on page 7 of ANSI C79.1–1994, incorporated by reference in section 430.22 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this paragraph); and

''(ii) a finished size and shape shown in ANSI C78.21–1989, including the referenced reflective characteristics in part 7 of ANSI C78.21.

''(B) The term 'BR30' refers to a BR incandescent reflector lamp with a diameter of 30/8ths of an

inch and the term 'BR40' refers to a BR incandescent reflector lamp with a diameter of 40/8ths of an inch.

''(54)(A) The term 'ER incandescent reflector lamp' means a reflector lamp that has—

''(i) an elliptical section below the major diameter of the bulb and above the approximate baseline of the bulb, as shown in figure 1 (RE) on page 7 of ANSI C79.1–1994, incorporated by reference in section 430.22 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this paragraph); and

''(ii) a finished size and shape shown in ANSI C78.21–1989, incorporated by reference in section 430.22 of title 10, Code of Federal Regulations (as in effect on the date of enactment of this paragraph).

''(B) The term 'ER30' refers to an ER incandescent reflector lamp with a diameter of 30/8ths of an inch and the term 'ER40' refers to an ER incandescent reflector lamp with a diameter of 40/8ths of an inch.

''(55) The term 'R20 incandescent reflector lamp' means a reflector lamp that has a face diame-

ter of approximately 2.5 inches, as shown in figure 1(R) on page 7 of ANSI C79.1–1994.''.

(b) STANDARDS FOR FLUORESCENT LAMPS AND INCANDESCENT REFLECTOR LAMPS.—Section 325(i) of the Energy Policy and Conservation Act (42 U.S.C. 6925(i)) is amended by striking paragraph (1) and inserting the following:

''(1) STANDARDS.—

''(A) DEFINITION OF EFFECTIVE DATE.—In this paragraph, except as specified in subparagraphs (C) and (D), the term 'effective date' means, with respect to each type of lamp specified in a table contained in subparagraph (B), the last day of the period of months corresponding to that type of lamp, as specified in the table, that follows the date of enactment of the [short title].

''(B) MINIMUM STANDARDS.—Each of the following general service fluorescent lamps and incandescent reflector lamps manufactured after the effective date specified in the tables contained in this paragraph shall meet or exceed the following lamp efficacy and CRI standards:

"FLUORESCENT LAMPS

Lamp Type	Nominal Lamp Wattage	Minimum CRI	Minimum Average Lamp Efficacy (LPW)	Effective Date (Period of Months)
4-foot medium bi-pin	>35 W	69	75.0	36
	≤35 W	45	75.0	36
2-foot U-shaped	>35 W	69	68.0	36
	≤35 W	45	64.0	36
8-foot slimline	65 W	69	80.0	18
	≤65 W	45	80.0	18
8-foot high output	>100 W	69	80.0	18
	≤100 W	45	80.0	18

"INCANDESCENT REFLECTOR LAMPS

Nominal Lamp Wattage	Minimum Average Lamp Efficacy (LPW)	Effective Date (Period of Months)
40–50	10.5	36
51–66	11.0	36
67–85	12.5	36
86–115	14.0	36
116–155	14.5	36
156–205	15.0	36

"(C) EXEMPTIONS.—The standards specified in subparagraph (B) shall not apply to the following types of incandescent reflector lamps:

"(i) Lamps rated at 50 watts or less of the following types: ER30, BR30, BR40, and ER40 lamps.

"(ii) Lamps rated at 65 watts of the following types: BR30, BR40, and ER40 lamps.

"(iii) R20 incandescent reflector lamps of 45 watts or less.

"(D) EFFECTIVE DATES.—

"(i) ER, BR, AND BPAR LAMPS.—Except as provided in subparagraph (A), the

standards specified in subparagraph (B) shall apply with respect to ER incandescent reflector lamps, BR incandescent reflector lamps, BPAR incandescent reflector lamps, and similar bulb shapes on and after January 1, 2008.

''(ii) LAMPS BETWEEN 2.25–2.75 INCHES IN DIAMETER.—The standards specified in subparagraph (B) shall apply with respect to incandescent reflector lamps with a diameter of more than 2.25 inches, but not more than 2.75 inches, on and after January 1, 2008.''.

SEC. 123. USE OF ENERGY EFFICIENT LIGHTING FIXTURES AND BULBS.

(a) IN GENERAL.—Chapter 33 of title 40, United States Code, is amended—

(1) by redesignating sections 3313, 3314, and 3315 as sections 3314, 3315, and 3316, respectively; and

(2) by inserting after section 3312 the following:

"§ 3313. Use of energy efficient lighting fixtures and bulbs

''(a) CONSTRUCTION AND ALTERATION OF PUBLIC BUILDINGS.—Each public building constructed or significantly altered by the Administrator of General Services shall be equipped, to the maximum extent feasible as determined by the Administrator, with lighting fixtures and bulbs that are energy efficient.

''(b) MAINTENANCE OF PUBLIC BUILDINGS.—Each lighting fixture or bulb that is replaced by the Administrator in the normal course of maintenance of public buildings shall be replaced, to the maximum extent feasible as determined by the Administrator, with a lighting fixture or bulb that is energy efficient.

''(c) CONSIDERATIONS.—In making a determination under this section concerning the feasibility of installing a lighting fixture or bulb that is energy efficient, the Administrator shall consider—

''(1) the life cycle cost effectiveness of the fixture or bulb;

''(2) the compatibility of the fixture or bulb with existing equipment;

''(3) whether use of the fixture or bulb could result in interference with productivity;

''(4) the aesthetics relating to use of the fixture or bulb; and

''(5) such other factors as the Administrator determines appropriate.

''(d) ENERGY STAR.—A lighting fixture or bulb shall be treated as being energy efficient for purposes of this section if—

''(1) the fixture or bulb is certified under the Energy Star program established by section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6294a);

''(2) in the case of all LED luminaires, lamps, and systems whose efficacy (lumens per watt) and Color Rendering Index (CRI) meet the requirements for minimum luminaire efficacy and CRI for the Energy Star certification, as verified by an independent third-party testing laboratory that conducts its tests according to the procedures and recommendations of the Illuminating Engineering Society of North America, even if these luminaires, lamps, and systems have not received such certification; or

''(3) the Administrator has otherwise determined that the fixture or bulb is energy efficient.

''(e) SIGNIFICANT ALTERATIONS.—A public building shall be treated as being significantly altered for purposes of subsection (a) if the alteration is subject to congressional approval under section 3307.

''(f) EFFECTIVE DATE.—The requirements of subsections (a) and (b) shall take effect one year after the date of enactment of this subsection.''.

(b) CONFORMING AMENDMENT.—The analysis for chapter 33 of title 40, United States Code, is amended by striking the items relating to sections 3313, 3314, and 3315 and inserting the following:

''3313. Use of energy efficient lighting fixtures and bulbs.
''3314. Delegation.
''3315. Report to Congress.
''3316. Certain authority not affected.''.

Subtitle C—Residential Building Efficiency

SEC. 131. ENCOURAGING STRONGER BUILDING CODES.

(a) IN GENERAL.—Section 304 of the Energy Conservation and Production Act (42 U.S.C. 6833) is amended to read as follows:

''SEC. 304. UPDATING STATE BUILDING ENERGY EFFICIENCY CODES.

''(a) UPDATING NATIONAL MODEL BUILDING ENERGY CODES.—(1) The Secretary shall support updating the national model building energy codes and standards at least every three years to achieve overall energy savings, compared to the 2006 IECC for residential buildings and ASHRAE Standard 90.1–2004 for commercial buildings, of at least—

''(A) 30 percent by 2010;

''(B) 50 percent by 2020; and

''(C) targets to be set by the Secretary in intermediate and subsequent years, at the maximum level of energy efficiency that is technologically feasible and life-cycle cost effective.

''(2)(A) Whenever the provisions of the IECC or ASHRAE Standard 90.1 regarding building energy use are revised, the Secretary shall, not later than 6 months after the date of such revision, determine—

''(i) whether such revision will improve energy efficiency in buildings; and

''(ii) whether such revision will meet the targets under paragraph (1).

''(B) If the Secretary makes a determination under subparagraph (A)(ii) that a code or standard does not meet the targets under paragraph (1), or if a national model code or standard is not updated for more than three years, then the Secretary shall within 12 months propose a modified code or standard that meets such targets. The modified code or standard shall serve as the baseline for the next determination under subparagraph (A)(i).

''(C) The Secretary shall provide the opportunity for public comment on targets, determinations, and modified codes and standards under this subsection, and shall publish notice of targets, determinations, and modified codes

and standards under this subsection in the Federal Register.

''(b) STATE CERTIFICATION OF BUILDING ENERGY CODE UPDATES.—(1) Not later than 2 years after the date of enactment of the [short title], each State shall certify to the Secretary that it has reviewed and updated the provisions of its residential and commercial building codes regarding energy efficiency. Such certification shall include a demonstration that such State's code provisions meet or exceed the 2006 IECC for residential buildings and the ASHRAE Standard 90.1–2004 for commercial buildings, or achieve equivalent or greater energy savings.

''(2)(A) If the Secretary makes an affirmative determination under subsection (a)(2)(A)(i) or proposes a modified code or standard under subsection (a)(2)(B), each State shall within 2 years certify that it has reviewed and updated the provisions of its building code regarding energy efficiency. Such certification shall include a demonstration that such State's code provisions meet or exceed the revised code or standard, or achieve equivalent or greater energy savings.

''(B) If the Secretary fails to make a determination under subsection (a)(2)(A)(i) by the date specified in subsection (a)(2), or makes a negative determination, each State shall within 2 years after the specified date or the

date of the determination, certify that it has reviewed the revised code or standard, and updated the provisions of its building code regarding energy efficiency to meet or exceed any provisions found to improve energy efficiency in buildings, or to achieve equivalent or greater energy savings in other ways.

''(c) STATE CERTIFICATION OF COMPLIANCE WITH BUILDING CODES.—(1) Each State shall, not later than 3 years after a certification under subsection (b), certify that it has achieved compliance with the certified building energy code. Such certification shall include documentation of the rate of compliance based on independent inspections of a random sample of the new and renovated buildings covered by the code in the preceding year.

''(2) A State shall be considered to achieve compliance under paragraph (1) if—

''(A) at least 90 percent of new and renovated buildings covered by the code in the preceding year substantially meet all the requirements of the code; or

''(B) the estimated excess energy use of new and renovated buildings that did not meet the code in the preceding year, compared to a baseline of comparable buildings that meet the code, is not more than 10 percent of the estimated energy use of all

new and renovated buildings covered by the code in the preceding year.

''(d) FAILURE TO MEET DEADLINES.—(1) The Secretary shall permit extensions of the deadlines for the certification requirements under subsections (b) and (c) of this section for up to 1 year if a State can demonstrate that it has made a good faith effort to comply with such requirements and that it has made significant progress in doing so.

''(2) Any State for which the Secretary has not accepted a certification by a deadline under subsection (b) or (c) of this section, with any extension granted under paragraph (1), is out of compliance with this section.

''(3) In any State that is out of compliance with this section, a local government may be in compliance with this section by meeting the certification requirements under subsections (b) and (c) of this section.

''(e) TECHNICAL ASSISTANCE.—(1) The Secretary shall provide technical assistance, including building energy analysis and design tools, building demonstrations, and design assistance and training to enable the national model building energy codes and standards to meet the targets in subsection (a)(1).

''(2) The Secretary shall provide technical assistance to States to implement the requirements of this section,

including procedures for States to demonstrate that their code provisions achieve equivalent or greater energy savings than the national model codes and standards, and to improve and implement State residential and commercial building energy efficiency codes or to otherwise promote the design and construction of energy efficient buildings.

''(f) AVAILABILITY OF INCENTIVE FUNDING.—(1) The Secretary shall provide incentive funding to States to implement the requirements of this section, and to improve and implement State residential and commercial building energy efficiency codes, including increasing and verifying compliance with such codes. In determining whether, and in what amount, to provide incentive funding under this subsection, the Secretary shall consider the actions proposed by the State to implement the requirements of this section, to improve and implement residential and commercial building energy efficiency codes, and to promote building energy efficiency through the use of such codes.

''(2) Additional funding shall be provided under this subsection for implementation of a plan to achieve and document at least a 90 percent rate of compliance with residential and commercial building energy efficiency codes, based on energy performance—

''(A) to a State that has adopted and is implementing, on a Statewide basis—

''(i) a residential building energy efficiency code that meets or exceeds the requirements of the 2006 IECC, or any succeeding version of that code that has received an affirmative determination from the Secretary under subsection (a)(2)(A)(i); and

''(ii) a commercial building energy efficiency code that meets or exceeds the requirements of the ASHRAE Standard 90.1–2004, or any succeeding version of that standard that has received an affirmative determination from the Secretary under subsection (a)(2)(A)(i); or

''(B) in a State in which there is no Statewide energy code either for residential buildings or for commercial buildings, or where State codes fail to comply with subparagraph (A), to a local government that has adopted and is implementing residential and commercial building energy efficiency codes, as described in subparagraph (A).

''(3) Of the amounts made available under this subsection, the Secretary may use amounts required, not exceeding $500,000 for each State, to train State and local officials to implement codes described in paragraph (2).

''(4)(A) There are authorized to be appropriated to carry out this subsection—

''(i) $25,000,000 for each of fiscal years 2008 through 2012; and

''(ii) such sums as are necessary for fiscal year 2013 and each fiscal year thereafter.

''(B) Funding provided to States under paragraph (2) for each fiscal year shall not exceed one-half of the excess of funding under this subsection over $5,000,000 for the fiscal year.''.

(b) DEFINITION.—Section 303 of the Energy Conservation and Production Act (42 U.S.C. 6832) is amended by adding at the end the following new paragraph:

''(17) The term 'IECC' means the International Energy Conservation Code.''.

SEC. 132. ENERGY CODE IMPROVEMENTS APPLICABLE TO MANUFACTURED HOUSING.

(a) IN GENERAL.—Not later than 4 years after the date of enactment of this Act, the Secretary of Energy shall by regulation establish standards for energy efficiency in manufactured housing.

(b) CERTAIN REQUIREMENTS.—The regulations under subsection (a) shall be in accordance with the following:

(1) The energy conservation standards established under this subsection shall be based on the most recent version of the International Energy Conservation Code (including supplements) except where the Secretary finds that such code is not cost-effective, or a more stringent standard would be more cost-effective, based on total life-cycle construction and operating costs.

(2) The energy conservation standards established under this subsection may—

(A) take into consideration the design and factory construction techniques of manufactured homes;

(B) be based on the climate zones established by the Department of Housing and Urban Development rather than those under the International Energy Conservation Code; and

(C) provide for alternative practices that result in net estimated energy consumption equal to or less than the specified standards.

(3) The energy conservation standards established under this subsection shall be updated within one year after the date of enactment of this Act and

within one year after any revision to the International Energy Conservation Code.

(c) ENFORCEMENT.—Any manufacturer of manufactured housing that violates a provision of the regulations under subsection (a) is liable to the United States for a civil penalty in an amount not exceeding 1 percent of the manufacturer's retail list price of the manufactured housing.

SEC. 133. BASELINE BUILDING DESIGNS.

Section 327(f)(3)(D) of the Energy Policy and Conservation Act (42 U.S.C. 6297(f)(3)(D)) is amended to read as follows:

''(D) If the code uses one or more baseline building designs against which all submitted building designs are to be evaluated and such baseline building designs contain a covered product subject to an energy conservation standard established in or prescribed under section 325, the baseline building designs are based on the efficiency level for such covered product which—

''(i) meets but does not exceed such standard;

''(ii) is the efficiency level required by a regulation of that State for which the Secretary

has issued a rule granting a waiver under subsection (d) of this section; or

''(iii) is a level that, when evaluated in the baseline building design, the State has found to be feasible and cost-effective.''.

SEC. 134. REAUTHORIZATION OF WEATHERIZATION ASSISTANCE PROGRAM.

(a) AMENDMENT.—Section 422 of the Energy Conservation and Production Act (42 U.S.C. 6872) is amended by striking ''$500,000,000 for fiscal year 2006, $600,000,000 for fiscal year 2007, and $700,000,000 for fiscal year 2008'' and inserting ''$600,000,000 for fiscal year 2007, and $750,000,000 for each of fiscal years 2008, 2009, 2010, 2011, and 2012. From those sums, the Secretary is authorized to initiate an Alternative Delivery System Pilot Project to examine options for decreasing energy consumption associated with heating and cooling while increasing household participation by focusing on key energy saving components. Alternative Delivery System Pilot Projects should be undertaken in both hot and cold urban areas''.

(b) SUSTAINABLE ENERGY RESOURCES FOR CONSUMERS GRANTS.—(1) The Secretary of Energy may make funding available to local Weatherization agencies from amounts authorized under the amendment made by

subsection (a) to expand the weatherization assistance program for residential buildings to include materials, benefits, and renewable and domestic energy technologies not currently covered by the program, provided that the State Weatherization grantee has certified that the applicant has the capacity to carry out the proposed activities and that the grantee will include the project in its financial oversight of the Weatherization Assistance program.

(2) In selecting the grants, the program shall give priority to—

(A) the expected effectiveness and benefits of the proposed project to low- and moderate-income energy consumers;

(B) the potential for replication of successful results;

(C) the impact on the health and safety and energy costs of those served; and

(D) the extent of partnerships with other public and private entities that contribute to the resources and implementation of the program, including financial partnerships.

(3) Funding for such projects may equal up to two percent of funding in any fiscal year, provided that no funding is utilized for Sustainable Energy Resources for

Consumers grants in any fiscal year in which Weatherization appropriations are less than $275,000,000.

Subtitle D—Commercial and Federal Building Efficiency

SEC. 141. DEFINITIONS.

In this subtitle:

(1) CONSORTIUM.—The term ''Consortium'' means the Green Building Partnership Consortium created in response to section 142(c)(1) to represent the private sector in a Public-Private Partnership to promote high-performance green buildings and zero-net-energy commercial buildings.

(2) DIRECTOR.—The term ''Director'' means the individual appointed to the position established under section 142(b).

(3) FEDERAL FACILITY.—

(A) IN GENERAL.—The term ''Federal facility'' means any building or facility the intended use of which requires the building or facility to be—

(i) accessible to the public; and

(ii) constructed or altered by or on behalf of the United States.

(B) EXCLUSIONS.—The term ''Federal facility'' does not include a privately-owned resi-

dential or commercial structure that is not leased by the Federal Government.

(4) HIGH-PERFORMANCE GREEN BUILDING.—The term ''high-performance green building'' means a building that, during its life-cycle—

(A) reduces energy, water, and material resource use, and in the case of a new or renovated Federal building, meets or exceeds the standards under section 305(a)(3) of the Energy Conservation and Production Act (42 U.S.C. 6834(a)(3));

(B) improves indoor environmental quality including, reducing indoor pollution, improving thermal comfort, and improving lighting and acoustic environments that affect occupant health and productivity;

(C) reduces negative impacts on the environment throughout the life-cycle of the building, including air and water pollution and waste generation;

(D) increases the use of environmentally preferable products, including biobased, recycled content, and nontoxic products with lower life-cycle impacts;

(E) increases reuse and recycling opportunities;

(F) integrates systems in the building;

(G) reduces the environmental and energy impacts of transportation through building location and site design that support a full range of transportation choices for users of the building; and

(H) considers indoor and outdoor effects of the building on human health and the environment, including—

(i) improvements in worker productivity;

(ii) the life-cycle impacts of building materials and operations; and

(iii) other factors that the Office considers to be appropriate.

(5) LIFE-CYCLE.—The term ''life-cycle'', with respect to a high-performance green building, means all stages of the useful life of the building (including components, equipment, systems, and controls of the building) beginning at conception of a green building project and continuing through site selection, design, construction, landscaping, commissioning, operation,

maintenance, renovation, deconstruction or demolition, removal, and recycling of the green building.

(6) LIFE-CYCLE ASSESSMENT.—The term ''life-cycle assessment'' means a comprehensive system approach for measuring the environmental performance of a product or service over the life of the product or service, beginning at raw materials acquisition and continuing through manufacturing, transportation, installation, use, reuse, and end-of-life waste management.

(7) LIFE-CYCLE COSTING.—The term ''life-cycle costing'', with respect to a high-performance green building, means a technique of economic evaluation that—

(A) sums, over a given study period, the costs of initial investment (less resale value), replacements, operations (including energy use), and maintenance and repair of an investment decision; and

(B) is expressed—

(i) in present value terms, in the case of a study period equivalent to the longest useful life of the building, determined by taking into consideration the typical life of

such a building in the area in which the building is to be located; or

(ii) in annual value terms, in the case of any other study period.

(8) OFFICE.—The term ''Office'' means the Office of High-Performance Green Buildings established under section 142(a).

(9) PRACTICES.—The term ''practices'' mean design, financing, permitting, construction, commissioning, operation and maintenance, and other practices that contribute to achieving zero-net-energy commercial buildings.

(10) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(11) ZERO-NET-ENERGY.—The term ''zero-net-energy commercial building'' means a commercial building that is designed, constructed, and operated to—

(A) require a greatly reduced quantity of energy to operate;

(B) meet the balance of energy needs from sources of energy that do not produce greenhouse gases;

(C) therefore result in no net emissions of greenhouse gases; and

(D) be economically viable.

SEC. 142. HIGH-PERFORMANCE GREEN BUILDINGS.

(a) ESTABLISHMENT OF OFFICE.—Not later than 60 days after the date of enactment of this Act, the Secretary shall establish within the Office of Energy Efficiency and Renewable Energy an Office of High-Performance Green Buildings.

(b) DIRECTOR.—

(1) APPOINTMENT.—The Secretary shall appoint an individual to serve as Director, a position in the career-reserved Senior Executive service, to carry out duties as required under this subtitle.

(2) COMPENSATION.—The compensation of the Director shall not exceed the maximum rate of basic pay for the Senior Executive Service under section 5382 of title 5, United States Code, including any applicable locality-based comparability payment that may be authorized under section 5304(h)(2)(C) of that title.

(3) DUTIES.—The Director shall, with respect to Federal facilities—

(A) identify and biennially reassess improved or higher rating standards;

(B) identify and develop green building standards that could be used for all types of Federal facilities;

(C) establish green practices that can be used throughout the life of a Federal facility;

(D) review and analyze current Federal budget practices and life-cycle costing issues, and make recommendations to Congress, in accordance with section 145;

(E) identify within the planning, budgeting, and construction process all types of Federal facility procedures that inhibit new and existing Federal facilities from becoming high-performance green buildings;

(F) identify inconsistencies in Federal law with respect to product acquisition guidelines for energy efficient and environmentally preferable products;

(G) recommend actions to improve compliance by Federal agencies with standards for environmentally responsible acquisition;

(H) in coordination with the Office of Management and Budget, review the budget process for capital programs with respect to alternatives for—

(i) restructuring of budgets to require the use of complete energy- and environmental-cost accounting;

(ii) using operations expenditures in budget-related decisions while simultaneously incorporating productivity and health measures (as those measures can be quantified by the Office, with the assistance of universities and national laboratories);

(iii) permitting Federal agencies to retain all identified savings accrued as a result of the use of life-cycle costing for future high-performance green building initiatives; and

(iv) identifying short-term and long-term cost savings that accrue from high-performance green buildings, including those relating to health and productivity;

(I) identify green, self-sustaining technologies to address the operational needs of Federal facilities in times of national security emergencies, natural disasters, or other dire emergencies;

(J) in consultation with the Environmental Protection Agency, develop and implement a comprehensive indoor air quality program for all Federal facilities to ensure the safety of Federal workers and facility occupants—

(i) during new construction and renovation of facilities; and

(ii) in existing facilities;

(K) implement the zero-energy commercial buildings initiative under section 143; and

(L) perform such other functions as are assigned under this subtitle.

(4) DUTIES.—The Director shall, with respect to development of high performance green buildings and zero-energy commercial buildings throughout the economy—

(A) develop the legal predicates and agreements for, negotiate, and establish one or more public-private partnerships with the Consortium, members of the Consortium, and other capable counterparties meeting the qualifications of the Consortium, to further such development;

(B) represent the public and the Department of Energy in negotiating and performing

in accord with such public-private partnerships; and

(C) use appropriated funds in an effective manner to encourage the maximum investment of private funds to achieve such development.

(5) REPORTING.—The Director shall report directly to the Assistant Secretary for Energy Efficiency and Renewable Energy, or to other senior officials in a way that facilitates the integrated program of this subtitle for both energy efficiency and renewable energy and both technology development and technology deployment.

(6) COORDINATION.—The Director shall ensure full coordination of high-performance green building information and activities, including activities under this subtitle, within the Federal Government by working with the General Services Administration and all relevant agencies, including, at a minimum—

(A) the Environmental Protection Agency;

(B) the Office of the Federal Environmental Executive;

(C) the Office of Federal Procurement Policy;

(D) the Department of Energy, particularly the Federal Energy Management Program;

(E) the Department of Health and Human Services;

(F) the Department of Housing and Urban Development;

(G) the Department of Defense;

(H) such other Federal agencies as the Director considers to be appropriate; and

(I) such nonprofit green building rating and analysis entities as the Director determines can offer support, expertise, and review services.

(c) GREEN BUILDING PARTNERSHIP CONSORTIUM.—

(1) RECOGNITION.—Not later than 90 days after the date of enactment of this Act, the Director shall formally recognize one or more groups that qualify as a green building partnership consortium.

(2) REPRESENTATION TO QUALIFY.—To qualify under this section, any consortium shall include representation from—

(A) the design professions, including national associations of architects and of professional engineers;

(B) the development, construction, financial, and real estate industries;

(C) building owners and operators from the public and private sectors;

(D) academic and research organizations, including at least one national laboratory with extensive commercial building energy expertise;

(E) building code agencies and organizations, including a model energy code-setting organization;

(F) independent green building associations or councils;

(G) experts in indoor air quality and environmental factors;

(H) experts in intelligent buildings and integrated building information systems;

(I) utility energy efficiency programs; and

(J) nongovernmental energy efficiency organizations.

(3) FUNDING.—The Secretary may make payments to the Consortium pursuant to the terms of a public-private partnership for such activities of the Consortium undertaken under such a partnership as described in this subtitle directly to the Consortium or through one or more of its members.

(d) REPORT.—Not later than 2 years after the date of enactment of this Act, and biennially thereafter, the Director, in consultation with the Consortium, shall submit to Congress a report that—

(1) describes the status of the green building initiatives under this subtitle and other Federal programs in effect as of the date of the report, including—

(A) the extent to which the programs are being carried out in accordance with this subtitle; and

(B) the status of funding requests and appropriations for those programs;

(2) summarizes and highlights development, at the State and local level, of green building initiatives, including executive orders, policies, or laws adopted promoting green building (including the status of implementation of those initiatives); and

(3) includes, for the 2-year period covered by the report, recommendations to address each of the matters, and a plan for implementation of each recommendation, described in paragraph (1) of this subsection and subparagraphs (E) through (I) of subsection (b)(3).

SEC. 143. ZERO-ENERGY COMMERCIAL BUILDINGS INITIATIVE.

(a) GOAL.—The Director, in partnership with the Consortium, shall periodically study and refine a national goal to reduce commercial building energy use and achieve zero-net-energy commercial buildings. Unless the Director concludes that such targets are unachievable or unrealistic, the goal shall include objectives that—

(1) all new commercial buildings constructed after the beginning of 2025 are zero-net-energy commercial buildings;

(2) by 2035, 50 percent of the then existing stock of commercial buildings that were constructed before 2025 are zero-net-energy commercial buildings; and

(3) by 2050, all commercial buildings are zero-net-energy commercial buildings.

(b) STRATEGY.—

(1) IN GENERAL.—The Director, in partnership with the Consortium, shall develop a market transformation strategy intended to achieve the adopted goal by significantly accelerating the development and widespread deployment of energy efficiency technologies, practices, and policies in both new and existing commercial buildings, and by leveraging State,

utility, and private sector commercial building energy efficiency programs.

(2) FEDERAL COMPLIANCE WITH GOAL.—The Director, in partnership with the Consortium, shall further identify and adopt a strategy leading to zero-net-energy performance for all Federal buildings in accordance with the adopted goal.

(c) INITIATIVE.—The Director, in partnership with the Consortium, shall implement an initiative to carry out the strategy that may include—

(1) support for industry efforts to develop advanced materials, equipment, controls, practices, and integrated building systems aimed at achieving zero-net-energy commercial buildings and monitoring and benchmarking commercial building energy use;

(2) training, education, and awareness programs, including—

(A) programs in cooperation with industry and professional associations and educational institutions to provide education on achieving sustainable and energy-efficient performance through proper system and structure design, construction, and operation to—

(i) architects;

(ii) mechanical, electrical, and plumbing engineers;

(iii) contractors; and

(iv) construction managers and facility managers;

(B) programs to incorporate energy efficiency and sustainability elements into architecture, engineering, and vocational training and certification curricula, including professional certification and continuing education programs; and

(C) regional and national public education campaigns to educate real estate, finance, and other commercial buildings professionals and the general public about the opportunities for energy and cost savings and associated environmental and health benefits associated with high performance green buildings;

(3) pilot projects to demonstrate and document the performance of scalable and replicable technologies, practices, and policies to achieve high-performance green buildings and zero-net-energy commercial buildings, including—

(A) pilot projects representing each market segment or building type in each climate region

that include current best practice in integrated design, technology and systems, construction, commissioning, operation, and building information management;

(B) pilot projects, in cooperation with State and local governments, in public buildings; and

(C) pilot projects, in cooperation with public school districts and colleges and universities, to—

(i) demonstrate such technologies and practices in new and existing facilities;

(ii) involve students and faculty members in integrating energy efficiency and green building concepts and measures within the educational curriculum; and

(iii) use education facilities as showcases to communicate these concepts to the community;

(4) technical assistance and funding of pilot projects for the development and use of new building energy design standards, model designs, model energy codes, and incentives and other policies, to be provided to designers, builders, developers, commer-

cial building owners, and utility and government energy efficiency programs, including—

(A) support for code and standards organizations to develop aggressive model energy codes, beyond-code guidelines, and code compliance programs for new and existing buildings;

(B) assistance to utilities, builders, and State and local officials in developing, implementing, and evaluating pilot programs to achieve building design and actual energy performance that meet and exceed performance levels in the model energy codes; and

(C) support for development and dissemination of model programs and policies that provide incentives for high performance green buildings, such as accelerated zoning and construction permitting and inspections, density bonuses, and State and local tax incentives;

(5) technical assistance and funding of pilot projects for innovative market-based initiatives to advance energy-efficient technologies and practices in new and existing commercial buildings, provided to State agencies, utilities, and other entities, including—

(A) design assistance and incentives for incorporating sustainability and energy efficiency beginning with the first stages of building design and continuing through start-up commissioning and long-term operation;

(B) performance-based design and construction fees for high performance green construction and renovation;

(C) equipment leasing and financing strategies for energy efficiency upgrades of new and replacement commercial building equipment;

(D) trade-in programs for early retirement of low-efficiency commercial building equipment and system components, such as motors, air conditioners, boilers, lighting, and windows;

(E) improved methods of energy performance contracting to reduce transaction costs and encourage the use of third-party funding and expertise for energy-efficient retrofitting of existing commercial buildings;

(F) improved model protocols for commercial building energy audits, energy performance measurement and verification, continuous commissioning, and ongoing performance monitoring and diagnostics; and

(G) strategies to reduce barriers to energy efficiency investment by addressing split incentives between commercial building owners and tenants;

(6) development, dissemination, technical assistance, and pilot project activities to improve the practice of monitoring, benchmarking, and disclosure of actual commercial building energy performance and operating costs, including—

(A) improved methods of measuring and compiling energy performance data on a statistically significant share of commercial new construction, renovation, and energy retrofit projects;

(B) development and dissemination of energy performance metrics for the commercial building stock and for important subcategories of commercial buildings;

(C) improved methods of providing energy performance feedback to commercial building owners, operators, and occupants, including real-time feedback and comparisons to performance goals, past performance, and similar buildings;

(D) voluntary programs at the national, regional, and sectoral levels to recognize and reward commercial buildings with exceptional performance or performance improvement; and

(E) increased availability and use of tools for post occupancy assessment of energy efficiency and occupant satisfaction with commercial high performance green buildings, and for measuring and documenting non-energy financial and other benefits of such buildings;

(7) in cooperation with the Energy Information Administration and with utility, State, and private sector organizations, development and application of improved methods for assessing trends in the energy performance of the commercial buildings stock, new construction, and building renovations, by building type and region, in order to track progress toward the goals adopted under subsection (a); and

(8) such otherwise authorized activities that the Secretary and the Director determine are necessary to the success of the initiative.

SEC. 144. PUBLIC OUTREACH.

The Director, in coordination with the Consortium, shall carry out public outreach to inform individuals and

entities of the information and services available Governmentwide by—

(1) establishing and maintaining a national high-performance green building clearinghouse, including on the internet, that—

(A) identifies existing similar efforts and coordinates activities of common interest; and

(B) provides information relating to high-performance green buildings, including hyperlinks to internet sites that describe the activities, information, and resources of—

(i) the Federal Government;

(ii) State and local governments;

(iii) the private sector (including non-governmental and nonprofit entities and organizations); and

(iv) international organizations;

(2) identifying and recommending educational resources for implementing high-performance green building practices, including security and emergency benefits and practices;

(3) providing access to technical assistance on using tools and resources to make more cost-effective, energy-efficient, health-protective, and environmentally beneficial decisions for constructing high-

performance green buildings, particularly tools available to conduct life-cycle costing and life-cycle assessment;

(4) providing information on application processes for certifying a high-performance green building, including certification and commissioning;

(5) providing technical information, market research, or other forms of assistance or advice that would be useful in planning and constructing high-performance green buildings;

(6) using such other methods as are determined by the Director to be appropriate;

(7) surveying existing research and studies relating to high-performance green buildings;

(8) coordinating activities of common interest;

(9) developing and recommending a high-performance green building practices that—

(A) identify information and research needs, including the relationships between health, occupant productivity, and each of—

(i) pollutant emissions from materials and products in the building;

(ii) natural day lighting;

(iii) ventilation choices and technologies;

(iv) heating, cooling, and system control choices and technologies;

(v) moisture control and mold;

(vi) maintenance, cleaning, and pest control activities;

(vii) acoustics; and

(viii) other issues relating to the health, comfort, productivity, and performance of occupants of the building; and

(B) promote the development and dissemination of high-performance green building measurement tools that, at a minimum, may be used—

(i) to monitor and assess the life-cycle performance of facilities (including demonstration projects) built as high-performance green buildings; and

(ii) to perform life-cycle assessments;

(10) assisting the budget and life-cycle costing functions of the Office under section 145;

(11) studying and identifying potential benefits of green buildings relating to security, natural disaster, and emergency needs of the Federal Government; and

(12) supporting other research initiatives determined by the Office.

SEC. 145. BUDGET AND LIFE-CYCLE COSTING AND CONTRACTING.

The Director, in coordination with the Consortium, shall—

(1) identify, review, and analyze current budget and contracting practices that affect achievement of high-performance green buildings, including the identification of barriers to green building life-cycle costing and budgetary issues;

(2) develop guidance and conduct training sessions with budget specialists and contracting personnel from Federal agencies and budget examiners to apply life-cycle cost criteria to actual projects;

(3) identify tools to aid life-cycle cost decision-making; and

(4) explore the feasibility of incorporating the benefits of green buildings, such as security benefits, into a cost-budget analysis to aid in life-cycle costing for budget and decision making processes.

SEC. 146. INCENTIVES.

As soon as practicable after the date of enactment of this Act, the Director shall identify incentives to encourage the use of green buildings and related technology in

the operations of the Federal Government, including through—

(1) the provision of recognition awards; and

(2) the maximum feasible retention of financial savings in the annual budgets of Federal agencies for use in reinvesting in future green building initiatives.

SEC. 147. FEDERAL PROCUREMENT.

(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Director of the Office of Federal Procurement Policy, in consultation with the Director and the Under Secretary of Defense for Acquisition, Technology, and Logistics, shall promulgate revisions of the applicable acquisition regulations, to take effect as of the date of promulgation of the revisions—

(1) to direct any Federal procurement executives involved in the acquisition, construction, or major renovation (including contracting for the construction or major renovation) of any facility—

(A) to employ integrated design principles;

(B) to improve site selection for environmental and community benefits;

(C) to optimize building and systems energy performance;

(D) to protect and conserve water;

(E) to enhance indoor environmental quality; and

(F) to reduce environmental impacts of materials and waste flows; and

(2) to direct Federal procurement executives involved in leasing buildings, to give preference to the lease of facilities that—

(A) are energy-efficient; and

(B) to the maximum extent practicable, have applied contemporary high-performance and sustainable design principles during construction or renovation.

(b) GUIDANCE.—Not later than 90 days after the date of promulgation of the revised regulations under subsection (a), the Director of the Office of Procurement Policy shall issue guidance to all Federal procurement executives providing direction and instructions to renegotiate the design of proposed facilities, renovations for existing facilities, and leased facilities to incorporate improvements that are consistent with this section.

SEC. 148. USE OF ENERGY AND WATER EFFICIENCY MEASURES IN FEDERAL BUILDINGS.

Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended by adding at the end the following:

''(f) USE OF ENERGY AND WATER EFFICIENCY MEASURES IN FEDERAL BUILDINGS.—

''(1) FACILITY ENERGY MANAGERS.—

''(A) IN GENERAL.—Each Federal agency shall designate a manager responsible for implementing this subsection and reducing energy use at each building or facility that meets criteria under subparagraph (B).

''(B) COVERED FACILITIES.—The Secretary shall develop criteria, after consultation with affected agencies, energy efficiency advocates, and energy and utility service providers, that cover buildings and facilities, including central utility plants and distribution systems and other energy intensive operations, comprising at least two-thirds of total Federal building and facility energy use.

''(2) ENERGY AND WATER EVALUATIONS AND COMMISSIONING.—

''(A) EVALUATIONS.—Not later than 18 months after the date of enactment of this subsection, and every 5 years thereafter, each energy manager shall complete a comprehensive energy and water evaluation for each building

or facility that meets criteria under paragraph (1)(B).

''(B) RECOMMISSIONING AND RETROFITTING.—As part of the evaluation under subparagraph (A) or on the same schedule the energy manager shall recommission and retrofit each such building and facility if applicable.

''(3) IMPLEMENTATION OF IDENTIFIED ENERGY AND WATER EFFICIENCY MEASURES.—

''(A) IN GENERAL.—Not later than 2 years after the completion of each evaluation under paragraph (1), each energy manager—

''(i) shall fully implement each energy and water-saving measure identified in the evaluation conducted under paragraph (2) that is life-cycle cost-effective and has a 12-year or shorter simple payback period;

''(ii) may implement any energy or water-saving measure that the Federal agency identified in the evaluation conducted under paragraph (1) that is life-cycle cost-effective and has longer than a 12-year simple payback period; and

"(iii) may bundle individual measures of varying paybacks together into combined projects.

"(B) PAYBACK PERIOD.—For the purpose of subparagraph (A), the simple payback period of a measure shall be obtained by dividing—

"(i) the estimated initial implementation cost of the measure (other than financing costs); by

"(ii) the annual cost savings from the measure.

"(C) COST SAVINGS.—For the purpose of subparagraph (B), cost savings shall include net savings in estimated—

"(i) energy and water costs; and

"(ii) operations, maintenance, repair, replacement, and other direct costs.

"(D) EXCEPTIONS.—The Secretary may modify or make exceptions to the calculation of a 12-year simple payback under this paragraph in the guidelines issued by the Secretary under paragraph (5).

"(E) LIFE-CYCLE COST-EFFECTIVE.—For the purpose of subparagraph (A), determination of whether a measure is life-cycle cost-effective

shall use methods and procedures developed pursuant to section 544.

''(4) FOLLOW-UP ON IMPLEMENTED MEASURES.—For each measure implemented under paragraph (3), each energy manager shall ensure that—

''(A) equipment, including building and equipment controls, is fully commissioned at acceptance to be operating at design specifications;

''(B) a plan for appropriate operations, maintenance, and repair of the equipment is in place at acceptance and is followed;

''(C) equipment and system performance is measured during its entire life to ensure proper operations, maintenance, and repair; and

''(D) energy and water savings are measured and verified.

''(5) GUIDELINES.—

''(A) IN GENERAL.—The Secretary shall issue guidelines and necessary criteria that each Federal agency shall follow for implementation of—

''(i) paragraphs (1) and (2) not later than 180 days after the date of enactment of this subsection; and

"(ii) paragraphs (3) and (4) not later than 1 year after the date of enactment of this subsection.

"(B) RELATIONSHIP TO FUNDING SOURCE.—The guidelines issued by the Secretary under subparagraph (A) shall be appropriate and uniform for measures funded with each type of funding made available under paragraph (9), but may distinguish between different types of measures project size, and other criteria the Secretary determines are relevant.

"(6) WEB-BASED CERTIFICATION.—

"(A) IN GENERAL.—For each building or facility that meets the criteria established by the Secretary under paragraph (1), the energy manager shall use the web-based tracking system under subparagraph (B) to certify compliance with the requirements for—

"(i) energy and water evaluations and recommissioning and retrofitting under paragraph (2);

"(ii) implementation of identified energy and water measures under paragraph (3); and

"(iii) follow-up on implemented measures under paragraph (4).

"(B) DEPLOYMENT.—

"(i) IN GENERAL.—Not later than 1 year after the date of enactment of this subsection, the Secretary shall develop and deploy the web-based tracking system required under this paragraph in a manner that tracks, at a minimum—

"(I) the covered buildings and facilities;

"(II) the status of meeting the requirements specified in subparagraph (A);

"(III) the estimated cost and savings for measures required to be implemented in a building or facility; and

"(IV) the measured savings and persistence of savings for implemented measures.

"(ii) EASE OF COMPLIANCE.—The Secretary shall ensure that energy manager compliance with the requirements in this paragraph, to the greatest extent prac-

ticable, can be accomplished with the use of streamlined procedures, and templates that minimize the time demands on Federal employees.

''(C) AVAILABILITY.—

''(i) IN GENERAL.—Subject to clause (ii), the Secretary shall make the web-based tracking system required under this paragraph available to Congress, other Federal agencies, and the public through the Internet.

''(ii) EXEMPTIONS.—At the request of a Federal agency, the Secretary may exempt specific data for specific buildings from disclosure under clause (i) for national security purposes.

''(7) BENCHMARKING OF FEDERAL FACILITIES.—

''(A) IN GENERAL.—The energy manager shall enter energy use data for each building or facility that meets the criteria established by the Secretary under paragraph (1) into a building energy use benchmarking system, such as the Energy Star Portfolio Manager.

''(B) SYSTEM AND GUIDANCE.—Not later than 1 year after the date of enactment of this subsection, the Secretary shall—

''(i) select or develop the building energy use benchmarking system required under this paragraph for each type of building; and

''(ii) issue guidance for use of the system.

''(8) FEDERAL AGENCY SCORECARDS.—

''(A) IN GENERAL.—The Director of the Office of Management and Budget shall issue semiannual scorecards for energy management activities carried out by each Federal agency that includes—

''(i) summaries of the status of implementing the various requirements of the agency and its energy managers under this subsection; and

''(ii) any other means of measuring performance that the Director considers appropriate.

''(B) AVAILABILITY.—The Director shall make the scorecards required under this para-

graph available to Congress, other Federal agencies, and the public through the Internet.

''(9) FUNDING AND IMPLEMENTATION.—

''(A) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this subsection.

''(B) FUNDING OPTIONS.—

''(i) IN GENERAL.—To carry out this subsection, a Federal agency may use any combination of—

''(I) appropriated funds made available under subparagraph (A); and

''(II) private financing, including financing available through energy savings performance contracts or utility energy service contracts.

''(ii) COMBINED FUNDING FOR SAME MEASURE.—A Federal agency may use any combination of appropriated funds and private financing described in clause (i) to carry out the same measure under this subsection, with proportional allocation for any energy and water savings.

''(iii) LACK OF APPROPRIATED FUNDS.—Since measures may be carried out using private financing described in clause (i), a lack of available appropriations shall not be considered a sufficient reason for the failure of a Federal agency to comply with this subsection.

''(C) IMPLEMENTATION.—Each Federal agency may implement the requirements under this subsection itself or may contract out performance of some or all of the requirements.

''(10) RULE OF CONSTRUCTION.—This subsection shall not be construed either to require or to obviate any contractor savings guarantees.''.

SEC. 149. DEMONSTRATION PROJECT.

(a) IN GENERAL.—The Director shall establish guidelines to implement a demonstration project to contribute to the research goals of the Office.

(b) PROJECTS.—In accordance with guidelines established by the Director under subsection (a) and the duties of the Director described in this subtitle, the Director shall carry out—

(1) for each of fiscal years 2009 through 2014, 1 demonstration project in a Federal building se-

lected by the Director in accordance with relevant agencies and described in subsection (c)(1), that—

(A) provides for the evaluation of the information obtained through the conduct of projects and activities under this subtitle; and

(B) achieves the highest rating offered by an existing high-performance green building rating system that is developed through a consensus-based process, provides minimum requirements in all performance categories, requires substantiating documentation and verifiable calculations, employs third-party post-construction review and verification, and is nationally recognized within the building industry;

(2) no fewer than 4 demonstration projects at 4 universities, that, as competitively selected by the director in accordance with subsection (c)(2), have—

(A) appropriate research resources and relevant projects to meet the goals of the demonstration project established by the Office; and

(B) the ability—

(i) to serve as a model for high-performance green building initiatives, including research and education;

(ii) to identify the most effective ways o use high-performance green building and landscape technologies to engage and educate undergraduate and graduate students;

(iii) to effectively implement a high-performance green building education program for students and occupants;

(iv) to demonstrate the effectiveness of various high-performance technologies in each of the 4 climatic regions of the United States described in subsection (c)(2)(B); and

(v) to explore quantifiable and non-quantifiable beneficial impacts on public health and employee and student performance;

(3) demonstration projects to evaluate replicable approaches to achieving various types of commercial buildings in various climates; and

(4) deployment activities to disseminate information on and encourage widespread adoption of technologies, practices, and policies to achieve zero-net-energy commercial buildings or low energy use and effective monitoring of energy use in commercial buildings.

(c) CRITERIA.—

(1) FEDERAL FACILITIES.—With respect to the existing or proposed Federal facility at which a demonstration project under this section is conducted, the Federal facility shall—

(A) be an appropriate model for a project relating to—

(i) the effectiveness of high-performance technologies;

(ii) analysis of materials, components, systems, and emergency operations in the building, and the impact of those materials, components, and systems, including the impact on the health of building occupants;

(iii) life-cycle costing and life-cycle assessment of building materials and systems; and

(iv) location and design that promote access to the Federal facility through walking, biking, and mass transit; and

(B) possess sufficient technological and organizational adaptability.

(2) UNIVERSITIES.—With respect to the 4 universities at which a demonstration project under this section is conducted—

(A) the universities should be selected, after careful review of all applications received containing the required information, as determined by the Director, based on—

(i) successful and established public-private research and development partnerships;

(ii) demonstrated capabilities to construct or renovate buildings that meet high indoor environmental quality standards;

(iii) organizational flexibility;

(iv) technological adaptability;

(v) the demonstrated capacity of at least 1 university to replicate lessons learned among nearby or sister universities, preferably by participation in groups or consortia that promote sustainability;

(vi) the demonstrated capacity of at least 1 university to have officially-adopted, institution-wide ''green building'' guidelines for all campus building projects; and

(vii) the demonstrated capacity of at least 1 university to have been recognized by similar institutions as a national leader in sustainability education and curriculum for students of the university; and

(B) each university shall be located in a different climatic region of the United States, each of which regions shall have, as determined by the Office—

(i) a hot, dry climate;

(ii) a hot, humid climate;

(iii) a cold climate; or

(iv) a temperate climate (including a climate with cold winters and humid summers).

(d) REPORT.—Not later than 1 year after the date of enactment of this Act, and annually thereafter through September 30, 2014—

(1) the Director shall submit to the Secretary a report that describes the status of the demonstration projects; and

(2) each University at which a demonstration project under this section is conducted shall submit to the Secretary a report that describes the status of the demonstration projects under this section.

SEC. 150. ENERGY EFFICIENCY FOR DATA CENTER BUILDINGS.

(a) IN GENERAL.—

(1) Not later than 90 days after the date of enactment of this Act, the Secretary of Energy and Administrator of the Environmental Protection Agency shall jointly, after consulting with information technology industry and other interested parties, initiate a voluntary national information program for those types of data centers and data center equipment and facilities that are widely used and for which there is a potential for significant data center energy savings as a result of such program.

(2) Such program shall—

(A) consistent with the objectives of paragraph (1), determine the type of data center and data center equipment and facilities to be covered under such program; and

(B) include specifications, measurements, and benchmarks that will enable data center operators to make more informed decisions about the energy efficiency and costs of data centers, and that—

(i) reflect the total energy consumption of data centers, including both equipment and facilities, taking into account—

(I) the performance and utilization of servers, data storage devices, and other information technology equipment;

(II) the efficiency of heating, ventilation, and air conditioning, cooling, and power conditioning systems;

(III) energy savings from the adoption of software and data management techniques; and

(IV) other factors determined by the organization described in subsection (b);

(ii) allow for creation of separate specifications, measurements, and benchmarks based on data center size and function, as well as other appropriate characteristics determined by the organization described in subsection (b);

(iii) advance the design and implementation of efficiency technologies to the maximum extent economically practical; and

(iv) provide to data center operators in the private sector and the Federal Gov-

ernment information about best practices and purchasing decisions that reduce the energy consumption of data centers;

(C) publish the information described in subparagraph (B), which may be disseminated through catalogs, trade publications, the Internet, or other mechanisms, that will allow data center operators to assess the energy consumption and potential cost savings of alternative data centers and data center equipment and facilities; and

(D) not later than 1 year after the date of enactment of this Act, and thereafter on an ongoing basis, transmit the information described in subparagraph (B) to the Secretary and the Administrator.

(3) Such program shall be developed and coordinated by the data center efficiency organization described in subsection (b) according to commonly accepted procedures for the development of specifications, measurements, and benchmarks.

(b) DATA CENTER EFFICIENCY ORGANIZATION.—Upon creation of the program under subsection (a), the Secretary and the Administrator shall jointly designate an information technology industry organization to coordi-

nate the program. Such organization, whether preexisting or formed specifically for the purposes of subsection (a), shall—

(1) consist of interested parties that have expertise in energy efficiency and in the development, operation, and functionality of computer data centers, information technology equipment, and software, as well as representatives of hardware manufacturers, data center operators, and facility managers;

(2) obtain and address input from Department of Energy National Laboratories or any college, university, research institution, industry association, company, or public interest group with applicable expertise in any of the areas listed in paragraph (1) of this subsection;

(3) follow commonly accepted procedures for the development of specifications and accredited standards development processes;

(4) have a mission to develop and promote energy efficiency for data centers and information technology; and

(5) have the primary responsibility to oversee the development and publishing of the information, measurements, and benchmarks described in subsection (a) and transmission of such information to

the Secretary and the Administrator for their adoption under subsection (c).

(c) ADOPTION OF SPECIFICATIONS.—The Secretary and the Administrator shall jointly, in accordance with the requirements of section 12(d) of the National Technology Transfer Advancement Act of 1995, adopt and publish the specifications, measurements, and benchmarks described in subsection (a) for use by the Federal Energy Management Program and the Energy Star program as energy efficiency requirements for the purposes of those programs.

(d) MONITORING.—The Secretary and the Administrator shall jointly monitor and evaluate the efforts to develop the program described in subsection (a) and, not later than 3 years after the date of enactment of this Act, shall make a determination as to whether such program is consistent with the objectives of subsection (a).

(e) ALTERNATIVE SYSTEM.—If the Secretary and the Administrator make a determination under subsection (d) that a voluntary national information program for data centers consistent with the objectives of subsection (a) has not been developed, the Secretary and the Administrator shall jointly, after consultation with the National Institute of Standards and Technology, develop, not later than 2

years after such determination, and implement the program under subsection (a).

(f) PROTECTION OF PROPRIETARY INFORMATION.—The Secretary, the Administrator, or the data center efficiency organization shall not disclose any proprietary information or trade secrets provided by any individual or company for the purposes of carrying out this program.

(g) DEFINITIONS.—For purposes of this section:

(1) The term ''data center'' means any facility that primarily contains electronic equipment used to process, store, and transmit digital information, which may be—

(A) a free-standing structure; or

(B) a facility within a larger structure, that utilizes environmental control equipment to maintain the proper conditions for the operation of electronic equipment.

(2) The term ''data center operator'' means any person or government entity that builds or operates a data center or purchases data center services, equipment, and facilities.

SEC. 151. AUTHORIZATION OF APPROPRIATIONS.

(a) IN GENERAL.—In addition to amounts authorized under subsections (b), (c), and (d), there are authorized to be appropriated to carry out this subtitle—

(1) $10,000,000 for fiscal year 2008; and

(2) $20,000,000 for each of the fiscal years 2009 through 2014, to remain available until expended.

(b) ZERO-ENERGY COMMERCIAL BUILDINGS INITIATIVE.—There are authorized to be appropriated to carry out the initiative described in section 143—

(1) $20,000,000 for fiscal year 2008;

(2) $50,000,000 for each of fiscal years 2009 and 2010;

(3) $100,000,000 for each of fiscal years 2011 and 2012; and

(4) $200,000,000 for each of fiscal years 2013 through 2050.

(c) DEMONSTRATION PROJECTS.—

(1) FEDERAL DEMONSTRATION PROJECT.—There are authorized to be appropriated to carry out the Federal demonstration project described in section 149(b)(1) $10,000,000 for the period of fiscal years 2009 through 2014, to remain available until expended.

(2) UNIVERSITY DEMONSTRATION PROJECTS.—There are authorized to be appropriated to carry out the university demonstration projects described in section 149(b)(2) $10,000,000 for the period of fis-

cal years 2009 through 2014, to remain available until expended.

(d) ENERGY EFFICIENCY FOR DATA CENTER BUILDINGS.—There are authorized to be appropriated to each of the Secretary and the Administrator for carrying out section 150 $250,000 for each of the fiscal years 2008 through 2012.

SEC. 152. STUDY AND REPORT ON USE OF POWER MANAGEMENT SOFTWARE.

(a) STUDY.—The Secretary of Energy, through the Federal Energy Management Program, shall conduct a study on the use of power management software by the Department of Energy and Federal facilities to reduce the use of electricity in computer monitors and personal computers.

(b) REPORT.—Not later than 60 days after the date of enactment of the Act, the Secretary shall submit to Congress a report containing the results of the study under subsection (a), including a description of the recommendations developed under the study. The Secretary and the Federal Energy Management Program are encouraged to draw upon similar studies and efforts by other Federal entities on power management software.

Subtitle E—Industrial Energy Efficiency

SEC. 161. INDUSTRIAL ENERGY EFFICIENCY.

(a) AMENDMENT.—Title III of the Energy Conservation and Policy Act (42 U.S.C. 6201 and following) is amended by adding the following after part D:

"PART E—INDUSTRIAL ENERGY EFFICIENCY

"SEC. 371. SURVEY OF WASTE INDUSTRIAL ENERGY RECOVERY AND POTENTIAL USE.

''Congress finds that—

''(1) the Nation should encourage the use of otherwise wasted energy and the development of combined heat and power and other waste energy recovery projects where there is wasted thermal energy in large volumes at potentially useful temperatures;

''(2) such projects would increase energy efficiency and lower pollution by generating power with no incremental fossil fuel consumption;

''(3) because recovered waste energy and combined heat and power projects are associated with end-uses of thermal energy and electricity at the local level, they help avoid new transmission lines, reduce line losses, reduce local air pollutant emissions, and reduce vulnerability to extreme weather and terrorism; and

''(4) States, localities, electric utilities, and other electricity customers may benefit from private investments in recovered waste energy and combined heat and power projects at industrial and commercial sites by avoiding generation, transmission and distribution expenses, and transmission line loss expenses that may otherwise be required to be recovered from ratepayers.

"SEC. 372. DEFINITIONS.

''For purposes of this Part:

''(1) The term 'Administrator' means the Administrator of the Environmental Protection Agency.

''(2) The term 'waste energy' means—

''(A) exhaust heat and flared gases from any industrial process;

''(B) waste gas or industrial tail gas that would otherwise be flared, incinerated or vented;

''(C) a pressure drop in any gas, excluding any pressure drop to a condenser that subsequently vents the resulting heat; and

''(D) such other forms of waste energy as the Administrator may identify.

''(3) The term 'recoverable waste energy' means waste energy from which electricity or useful ther-

mal energy may be recovered through modification of existing facilities or addition of new facilities.

''(4) The term 'net excess power' means, for any facility, recoverable waste energy recovered in the form of electricity in amounts exceeding the total consumption of electricity at the specific time of generation on the site where the facility is located.

''(5) The term 'useful thermal energy' is energy in the forms of direct heat, steam, hot water, or other thermal forms that is used in production and beneficial measures for heating, cooling, humidity control, process use, or other valid thermal end-use energy requirements, and for which fuel or electricity would otherwise be consumed.

''(6) The term 'combined heat and power system' means a facility—

''(A) that simultaneously and efficiently produces useful thermal energy and electricity; and

''(B) that recovers not less than 60 percent of the energy value in the fuel (on a lower-heating-value basis) in the form of useful thermal energy and electricity.

''(7) The terms 'electric utility', 'State regulated electric utility', 'nonregulated electric utility'

and other terms used in this Part have the same meanings as when such terms are used in title I of the Public Utility Regulatory Policies Act of 1978 (relating to retail regulatory policies for electric utilities).

"SEC. 373. SURVEY AND REGISTRY.

''(a) RECOVERABLE WASTE-ENERGY INVENTORY PROGRAM.—The Administrator, in cooperation with State energy offices, shall establish a Recoverable Waste-Energy Inventory Program. The program shall include an ongoing survey of all major industrial and large commercial combustion sources in the United States and the sites where these are located, together with a review of each for quantity and quality of waste energy.

''(b) CRITERIA.—The Administrator shall, within 120 days after the enactment of this section, develop and publish proposed criteria subject to notice and comment, and within 270 days of enactment, establish final criteria, to identify and designate those sources and sites in the inventory under subsection (a) where recoverable waste energy projects or combined heat and power system projects may have economic feasibility with a payback of invested costs within 5 years or less from the date of first full project operation (including incentives offered under this Part). Such criteria will include standards that insure that

projects proposed for inclusion in the Registry are not developed for the primary purpose of making sales of excess electric power under the regulatory treatment provided under this Part.

''(c) TECHNICAL SUPPORT.—The Administrator shall provide to owners or operators of combustion sources technical support and offer partial funding (up to one-half of total costs) for feasibility studies to confirm whether or not investment in recovery of waste energy or combined heat and power at that source would offer a payback period of 5 years or less.

''(d) REGISTRY.—(1) The Administrator shall, within one year after the enactment of this section, establish a Registry of Recoverable Waste-energy Sources, and sites on which those sources are located, which meet the criteria set forth under subsection (b). The Administrator shall update the Registry on not less than a monthly basis, and make the Registry accessible to the public on the Environmental Protection Agency web site. Any State or electric utility may contest the listing of any source or site by submitting a petition to the Administrator.

''(2) The Administrator shall register and include on the Registry all sites meeting the criteria of subsection (b). The Administrator shall calculate the total amounts of potentially recoverable waste energy from sources at such

sites, nationally and by State, and shall make such totals public, together with information on the air pollutant and greenhouse gas emissions savings that might be achieved with recovery of the waste energy from all sources and sites listed in the Registry.

''(3) The Administrator shall notify owners or operators of Recoverable Waste-Energy Sources and sites listed in the Registry prior to publishing the listing. The owner or operator of sources at such sites may elect to have detailed quantitative information concerning that site not made public by notifying the Administrator of that election. Information concerning that site shall be included in State totals unless there are fewer than 3 sites in the State.

''(4) As waste energy projects achieve successful recovery of waste energy, the Administrator shall remove the related sites or sources from the Registry, and shall designate the removed projects as eligible for the incentive provisions provided under this Part and the regulatory treatment required by this Part. No project shall be removed from the Registry without the consent of the owner or operator of the project if the owner or operator has submitted a petition under section 375 and such petition has not been acted upon or denied.

''(5) The Administrator shall not list any source constructed after the date of the enactment of this Part on the Registry if the Administrator determines that such source—

''(A) was developed for the primary purpose of making sales of excess electric power under the regulatory treatment provided under this Part; or

''(B) does not capture at least 60 percent of the total energy value of the fuels used (on a lower-heating-value basis) in the form of useful thermal energy, electricity, mechanical energy, chemical output, or some combination of them.

''(e) SELF-CERTIFICATION.—Owners, operators, or third-party developers of industrial waste-energy projects that qualify under standards established by the Administrator may self-certify their sites or sources to the Administrator for inclusion in the Registry, subject to procedures adopted by the Administrator. To prevent a fraudulent listing, the sources shall be included on the Registry only if the Administrator confirms the submitted data, at the Administrator's discretion.

''(f) NEW FACILITIES.—As a new energy-consuming industrial facility is developed after the enactment of this Part, to the extent it may constitute a site with recoverable waste energy that may qualify for the Registry, the

Administrator may elect to include it in the Registry at the request of its owner or operator or developer on a conditional basis, removing the site if its development ceases or it if fails to qualify for listing under this Part.

''(g) OPTIMUM MEANS OF RECOVERY.—For each site listed in the Registry, at the request of the owner or operator of the site, the Administrator shall offer, in cooperation with Clean Energy Application Centers operated by the Secretary of Energy, suggestions of optimum means of recovery of value from waste energy stream in the form of electricity, useful thermal energy, or other energy-related products.

''(h) REVISION.—Each annual State report under section 548(a) of the National Energy Conservation Policy Act shall include the results of the survey for that State under this section.

''(i) AUTHORIZATION.—There are authorized to be appropriated to the Administrator for the purposes of creating and maintaining the Registry and services authorized by this section not more than $1,000,000 for each of fiscal years 2008, 2009, 2010, 2010, and 2012 and not more than $5,000,000 to the States to provide funding for State energy office functions under this section.

"SEC. 374. WASTE ENERGY RECOVERY INCENTIVE GRANT PROGRAM.

"(a) ESTABLISHMENT OF PROGRAM.—There is established in the Environmental Protection Agency a Waste Energy Recovery Incentive Grant Program to provide incentive grants to owners and operators of projects that successfully produce electricity or incremental useful thermal energy from waste energy recovery (and to utilities purchasing or distributing such electricity) and to reward States that have achieved 80 percent or more of identified waste-heat recovery opportunities.

"(b) GRANTS TO PROJECTS AND UTILITIES.—

"(1) IN GENERAL.—The Administrator shall make grants to the owners or operators of waste energy recovery projects, and, in the case of excess power purchased or transmitted by a electric utility, to such utility. Grants may only be made upon receipt of proof of waste energy recovery or excess electricity generation, or both, from the project in a form prescribed by the Administrator, by rule.

"(2) EXCESS ELECTRIC ENERGY.—In the case of waste energy recovery, the grants under this section shall be made at the rate of $10 per megawatt hour of documented electricity produced from recovered waste energy (or by prevention of waste energy in the case of a new facility) by the project during

the first 3 calendar years of such production, beginning on or after the date of enactment of this Part. If the project produces net excess power and an electric utility purchases or transmits the excess power, 50 percent of so much of such grant as is attributable to the net excess power shall be paid to the electric utility purchasing or transporting the net excess power.

''(3) USEFUL THERMAL ENERGY.—In the case of waste energy recovery that produces useful thermal energy that is used for a purpose different from that for which the project is principally designed, the grants under this section shall be made to the owner or operator of the waste energy recovery project at the rate of $10 for each 3,412,000 Btus of such excess thermal energy used for such different purpose.

''(c) GRANTS TO STATES.—In the case of States that have achieved 80 percent or more of waste-heat recovery opportunities identified by the Administrator under this Part, the Administrator shall make grants to the States of up to $1,000 per Megawatt of waste-heat capacity recovered (or its thermal equivalent) to support State-level programs to identify and achieve additional energy efficiency.

''(d) ELIGIBILITY.—The Administrator shall establish rules and guidelines to establish eligibility for grants, shall make the grant program known to those listed in the Registry, and shall offer such grants on the basis of the merits of each project in recovering or preventing waste energy throughout the United States on an impartial, objective, and not unduly discriminatory basis.

''(e) AUTHORIZATION.—(1) There is authorized to be appropriated to the Administrator $100,000,000 for fiscal year 2008, and $200,000,000 for each of fiscal years 2009, 2010, 2011, and 2012 for grants under subsection (b) of this section, and such additional amounts during those years and thereafter as may be necessary for administration of the Waste Energy Recovery Incentive Grant Program.

''(2) There is authorized to be appropriated to the Administrator not more than $10,000,000 for each of the first five fiscal years after the enactment of this Part, to be available until expended for purposes of grants to States under subsection (c).

''SEC. 375. ADDITIONAL INCENTIVES FOR RECOVERY, UTILIZATION AND PREVENTION OF INDUSTRIAL WASTE ENERGY.

''(a) CONSIDERATION OF STANDARD.—Not later than 180 days after the receipt by a State regulatory au-

thority (with respect to each electric utility for which it has ratemaking authority), or nonregulated electric utility, of a request from a project sponsor or owner or operator, the State regulatory authority or nonregulated electric utility shall provide public notice and conduct a hearing respecting the standard established by subsection (b) and, on the basis of such hearing, shall consider and make a determination whether or not it is appropriate to implement such standard to carry out the purposes of this Part. For purposes of any such determination and any review of such determination in any court the purposes of this section supplement otherwise applicable State law. Nothing in this Part prohibits any State regulatory authority or nonregulated electric utility from making any determination that it is not appropriate to adopt any such standard, pursuant to its authority under otherwise applicable State law.

''(b) STANDARD FOR SALES OF EXCESS POWER.—For purposes of this section, the standard referred to in subsection (a) shall provide that an owner or operator of a waste energy recovery project identified on the Registry who generates net excess power shall be eligible to benefit from at least one of the options described in subsection (c) for disposal of the net excess power in accordance with

the rate conditions and limitations described in subsection (d).

''(c) OPTIONS.—The options referred to in subsection (b) are as follows:

''(1) SALE OF NET EXCESS POWER TO UTILITY.—The electric utility shall purchase the net excess power from the owner or operator of the eligible waste-energy recovery project during the operation of the project under a contract entered into for that purpose.

''(2) TRANSPORT BY UTILITY FOR DIRECT SALE TO THIRD PARTY.—The electric utility shall transmit the net excess power on behalf of the project owner or operator to up to three separate locations on that utility's system for direct sale by that owner or operator to third parties at such locations.

''(3) TRANSPORT OVER PRIVATE TRANSMISSION LINES.—The State and the electric utility shall permit, and shall waive or modify such laws as would otherwise prohibit, the construction and operation of private electric wires constructed, owned and operated by the project owner or operator, to transport such power to up to 3 purchasers within a 3-mile radius of the project, allowing such wires to utilize or cross public rights-of-way, without subjecting the

project to regulation as a public utility, and according such wires the same treatment for safety, zoning, land-use and other legal privileges as apply or would apply to the utility's own wires, except that—

"(A) there shall be no grant of any power of eminent domain to take or cross private property for such wires, and

"(B) such wires shall be physically segregated and not interconnected with any portion of the utility's system, except on the customer's side of the utility's revenue meter and in a manner that precludes any possible export of such electricity onto the utility system, or disruption of such system.

"(4) AGREED UPON ALTERNATIVES.—The utility and the owner or operator of the project may reach agreement on any alternate arrangement and its associated payments or rates that is mutually satisfactory and in accord with State law.

"(d) RATE CONDITIONS AND CRITERIA.—

"(1) IN GENERAL.—The options described in paragraphs (1) and (2) in subsection (c) shall be offered under purchase and transport rate conditions reflecting the rate components defined under paragraph (2) of this subsection as applicable under the

circumstances described in paragraph (3) of this subsection.

''(2) RATE COMPONENTS.—For purposes of this section:

''(A) PER UNIT DISTRIBUTION COSTS.—The term 'per unit distribution costs' means the utility's depreciated book-value distribution system costs divided by the previous year's volume of utility electricity sales or transmission at the distribution level in kilowatt hours.

''(B) PER UNIT DISTRIBUTION MARGIN.—The term 'per unit distribution margin' means:

''(i) In the case of a State regulated electric utility, a per-unit gross pretax profit determined by multiplying the utility's State-approved percentage rate of return for distribution system assets by the per unit distribution costs.

''(ii) In the case of an nonregulated utility, a per unit contribution to net revenues determined by dividing the amount of any net revenue payment or contribution to the nonregulated utility's owners or subscribers in the prior year by the utility's gross revenues for the prior year to obtain

a percentage (but not less than 10 percent) and multiplying that percentage by the per unit distribution costs.

''(C) PER UNIT TRANSMISSION COSTS.—The term 'per unit transmission costs' means the total cost of those transmission services purchased or provided by a utility on a per-kilowatt-hour basis as included in that utility's retail rate.

''(3) APPLICABLE RATES.—

''(A) RATES APPLICABLE TO SALE OF NET EXCESS POWER.—Sales made by a project owner or operator under the option described in subsection (c) (1) shall be paid for on a per kilowatt hour basis that shall equal the full undiscounted retail rate paid to the utility for power purchased by such a facility minus per unit distribution costs, as applicable to the type of utility purchasing the power. If the net excess power is made available for purchase at voltages that must be transformed to or from voltages exceeding 25 kilovolts to be available for resale by the utility, then the purchase price shall further be reduced by per unit transmission costs.

''(B) RATES APPLICABLE TO TRANSPORT BY UTILITY FOR DIRECT SALE TO THIRD PARTIES.—Transportation by utilities of power on behalf of the owner or operator of a project under the option described in subsection (c)(2) shall incur a transportation rate equal to the per unit distribution costs and per unit distribution margin, as applicable to the type of utility transporting the power. If the net excess power is made available for transportation at voltages that must be transformed to or from voltages exceeding 25 kilovolts to be transported to the designated third-party purchasers, then the transport rate shall further be increased by per unit transmission costs. In States with competitive retail markets for electricity, the applicable transportation rate for similar transportation shall be applied in lieu of any rate calculated under this paragraph.

''(4) LIMITATIONS.—(A) Any rate established for sale or transportation under this section shall be modified over time with changes in the electric utility's underlying costs or rates, and shall reflect the same time-sensitivity and billing periods as are es-

tablished in the retail sales or transportation rates offered by the utility.

''(B) No utility shall be required to purchase or transport an amount of net excess power under this section that exceeds the available capacity of the wires, meter, or other equipment of the electric utility serving the site unless the owner or operator of the project agrees to pay necessary and reasonable upgrade costs.

''(e) PROCEDURAL REQUIREMENTS FOR CONSIDERATION AND DETERMINATION.—(1) The consideration referred to in subsection (b) shall be made after public notice and hearing. The determination referred to in subsection (b) shall be—

''(A) in writing,

''(B) based upon findings included in such determination and upon the evidence presented at the hearing, and

''(C) available to the public.

''(2) The Administrator may intervene as a matter of right in a proceeding conducted under this section and may calculate the energy and emissions likely to be saved by electing to adopt one or more of the options, as well as the costs and benefits to ratepayers and the utility and to advocate for the waste-energy recovery opportunity.

''(3) Except as otherwise provided in paragraph (1), and paragraph (2), the procedures for the consideration and determination referred to in subsection (a) shall be those established by the State regulatory authority or the nonregulated electric utility. In the instance that there is more than one project seeking such consideration simultaneously in connection with the same utility, such proceeding may encompass all such projects, provided that full attention is paid to their individual circumstances and merits, and an individual judgment is reached with respect to each project.

''(f) IMPLEMENTATION.—(1) The State regulatory authority (with respect to each electric utility for which it has ratemaking authority) or nonregulated electric utility may, to the extent consistent with otherwise applicable State law—

''(A) implement the standard determined under this section, or

''(B) decline to implement any such standard.

''(2) If a State regulatory authority (with respect to each electric utility for which it has ratemaking authority) or nonregulated electric utility declines to implement any standard established by this section, such authority or nonregulated electric utility shall state in writing the reasons therefor. Such statement of reasons shall be available

to the public, and the Administrator shall include the project in an annual report to Congress concerning lost opportunities for waste-heat recovery, specifically identifying the utility and stating the amount of lost energy and emissions savings calculated. If a State regulatory authority (with respect to each electric utility for which it has ratemaking authority) or nonregulated electric utility declines to implement the standard established by this section, the project sponsor may submit a new petition under this section with respect to such project at any time after 24 months after the date on which the State regulatory authority or nonregulated utility has declined to implement such standard.

"SEC. 376. CLEAN ENERGY APPLICATION CENTERS.

''(a) PURPOSE.—The purpose of this section is to rename and provide for the continued operation of the United States Department of Energy's Regional Combined Heat and Power (CHP) Application Centers.

''(b) FINDINGS.—The Congress finds the Department of Energy's Regional Combined Heat and Power (CHP) Application Centers program has produced significant energy savings and climate change benefits and will continue to do so through the deployment of clean energy technologies such as Combined Heat and Power (CHP),

recycled waste energy and biomass energy systems, in the industrial and commercial energy markets.

''(c) RENAMING.—The Combined Heat and Power Application Centers at the Department of Energy are hereby be redesignated as Clean Energy Application Centers. Any reference in any law, rule or regulation or publication to the Combined Heat and Power Application Centers shall be treated as a reference to the Clean Energy Application Centers.

''(d) RELOCATION.—In order to better coordinate efforts with the separate Industrial Assessment Centers and to assure that the energy efficiency and, when applicable, the renewable nature of deploying mature clean energy technology is fully accounted for, the Secretary of Energy shall relocate the administration of the Clean Energy Application Centers to the Office of Energy Efficiency and Renewable Energy within the Department of Energy. The Office of Electricity Delivery and Energy Reliability shall continue to perform work on the role of such technology in support of the grid and its reliability and security, and shall assist the Clean Energy Application Centers in their work with regard to the grid and with electric utilities.

''(e) GRANTS.—

''(1) IN GENERAL.—The Secretary of Energy shall make grants to universities, research centers,

and other appropriate institutions to assure the continued operations and effectiveness of 8 Regional Clean Energy Application Centers in each of the following regions (as designated for such purposes as of the date of the enactment of this section):

"(A) Gulf Coast.

"(B) Intermountain.

"(C) Mid-Atlantic.

"(D) Midwest.

"(E) Northeast.

"(F) Northwest.

"(G) Pacific.

"(H) Southeast.

"(2) ESTABLISHMENT OF GOALS AND COMPLIANCE.—In making grants under this section, the Secretary shall ensure that sufficient goals are established and met by each Center throughout the program duration concerning outreach and technology deployment.

"(f) ACTIVITIES.—Each Clean Energy Application Center shall operate a program to encourage deployment of clean energy technologies through education and outreach to building and industrial professionals, and to other individuals and organizations with an interest in efficient energy use. In addition, the Centers shall provide project

specific support to building and industrial professionals through assessments and advisory activities. Funds made available under this section may be used for the following activities:

''(1) Developing and distributing informational materials on clean energy technologies, including continuation of the eight existing Web sites.

''(2) Developing and conducting target market workshops, seminars, internet programs and other activities to educate end users, regulators, and stakeholders in a manner that leads to the deployment of clean energy technologies.

''(3) Providing or coordinating onsite assessments for sites and enterprises that may consider deployment of clean energy technology.

''(4) Performing market research to identify high profile candidates for clean energy deployment.

''(5) Providing consulting support to sites considering deployment of clean energy technologies.

''(6) Assisting organizations developing clean energy technologies to overcome barriers to deployment.

''(7) Assisting companies and organizations with performance evaluations of any clean energy technology implemented.

''(g) DURATION.—A grant awarded under this section shall be for a period of 5 years. Each grant shall be evaluated annually for its continuation based on its activities and results.

''(h) AUTHORIZATION.—There is authorized to be appropriated for purposes of this section the sum of $10,000,000 for each of fiscal years 2008, 2009, 2010, 2011, and 2012.''.

(b) TABLE OF CONTENTS.—The table of contents for such Act is amended by inserting the following after the items relating to part D of title III:

Subtitle F—Energy Efficiency of Public Institutions

SEC. 171. SHORT TITLE.

This subtitle may be cited as the ''Sustainable Energy Institutional Infrastructure Act of 2007''.

SEC. 172. FINDINGS.

The Congress finds the following:

(1) Many institutional entities own and operate, or are served by, district energy systems.

(2) A variety of renewable energy resources could be tapped by governmental and institutional energy systems to meet energy requirements.

(3) Use of these renewable energy resources to meet energy requirements will reduce reliance on fossil fuels and the associated emissions of air pollution and carbon dioxide.

(4) CHP is a highly efficient and environmentally beneficial means to generate electric energy and heat, and offers total efficiency much greater than conventional separate systems, where electric energy is generated at and transmitted long distances from a centrally located generation facility, and onsite heating and cooling equipment is used to meet nonelectric energy requirements.

(5) Heat recovered in a CHP generation system can be used for space heating, domestic hot water, or process steam requirements, or can be converted to cooling energy to meet air conditioning requirements.

(6) The increased efficiency of CHP results in reduction in emissions of air pollution and carbon dioxide.

(7) District energy systems represent a key opportunity for expanding implementation of CHP be-

cause district energy systems provide a means of delivering thermal energy from CHP to a substantial base of end users.

(8) District energy systems help cut peak power demand and reduce power transmission and distribution system constraints by meeting air conditioning demand through delivery of chilled water produced with CHP-generated heat or other energy sources, shifting power demand through thermal storage, and, with CHP, generating power near load centers.

(9) Evaluation and implementation of sustainable energy infrastructure is a complex undertaking involving a variety of technical, economic, legal, and institutional issues and barriers, and technical assistance is often required to successfully navigate these barriers.

(10) The major constraint to significant expansion of sustainable energy infrastructure by institutional entities is a lack of capital funding for implementation.

SEC. 173. DEFINITIONS.

For purposes of this subtitle—

(1) the term ''CHP'' means combined heat and power, or the generation of electric energy and heat in a single, integrated system;

(2) the term ''district energy systems'' means systems providing thermal energy to buildings and other energy consumers from one or more plants to individual buildings to provide space heating, air conditioning, domestic hot water, industrial process energy, and other end uses;

(3) the term ''institutional entities'' means local governments, public school districts, municipal utilities, State governments, Federal agencies, and other entities established by local, State, or Federal agencies to meet public purposes, and public or private colleges, universities, airports, and hospitals;

(4) the term ''renewable thermal energy sources'' means non-fossil-fuel energy sources, including biomass, geothermal, solar, natural sources of cooling such as cold lake or ocean water, and other sources that can provide heating or cooling energy;

(5) the term ''sustainable energy infrastructure'' means facilities for production of energy from CHP or renewable thermal energy sources and distribution of thermal energy to users; and

(6) the term ''thermal energy'' means heating or cooling energy in the form of hot water or steam (heating energy) or chilled water (cooling energy).

SEC. 174. TECHNICAL ASSISTANCE PROGRAM.

(a) ESTABLISHMENT.—The Secretary of Energy shall, with funds appropriated for this purpose, implement a program of information dissemination and technical assistance to institutional entities to assist them in identifying, evaluating, designing, and implementing sustainable energy infrastructure.

(b) INFORMATION DISSEMINATION.—The Secretary shall develop and disseminate information and assessment tools addressing—

(1) identification of opportunities for sustainable energy infrastructure;

(2) technical and economic characteristics of sustainable energy infrastructure;

(3) utility interconnection, and negotiation of power and fuel contracts;

(4) financing alternatives;

(5) permitting and siting issues;

(6) case studies of successful sustainable energy infrastructure systems; and

(7) computer software for assessment, design, and operation and maintenance of sustainable energy infrastructure systems.

(c) ELIGIBLE COSTS.—Upon application by an institutional entity, the Secretary may make grants to such applicant to fund—

(1) 75 percent of the cost of feasibility studies to assess the potential for implementation or improvement of sustainable energy infrastructure;

(2) 60 percent of the cost of guidance on overcoming barriers to project implementation, including financial, contracting, siting, and permitting barriers; and

(3) 45 percent of the cost of detailed engineering and design of sustainable energy infrastructure.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section $15,000,000 for fiscal year 2008, $15,000,000 for fiscal year 2009, and $15,000,000 for fiscal year 2010.

SEC. 175. REVOLVING FUND.

(a) ESTABLISHMENT.—The Secretary of Energy shall, with funds appropriated for this purpose, create a Sustainable Institutions Revolving Fund for the purpose of establishing and operating a Sustainable Institutions Revolving Fund (in this section referred to as the ''SIRF'') for the purpose of providing loans for the construction or improvement of sustainable energy infrastructure to serve institutional entities.

(b) ELIGIBLE COSTS.—A loan provided from the SIRF shall be for no more than 70 percent of the total capital costs of a project, and shall not exceed

$15,000,000. Such loans shall be for constructing sustainable energy infrastructure, including—

(1) plant facilities used for producing thermal energy, electricity, or both;

(2) facilities for storing thermal energy;

(3) facilities for distribution of thermal energy; and

(4) costs for converting buildings to use thermal energy from sustainable energy sources.

(c) QUALIFICATIONS.—Loans from the SIRF may be made to institutional entities for projects meeting the qualifications and conditions established by the Secretary, including the following minimum qualifications:

(1) The project shall be technically and economically feasible as determined by a detailed feasibility analysis performed or corroborated by an independent consultant.

(2) The borrower shall demonstrate that adequate and comparable financing was not found to be reasonably available from other sources, and that the project is economically more feasible with the availability of the SIRF loan.

(3) The borrower shall obtain commitments for the remaining capital required to implement the project, contingent on approval of the SIRF loan.

(4) The borrower shall provide to the Secretary reasonable assurance that all laborers and mechanics employed by contractors or subcontractors in the performance of construction work financed in whole or in part with a loan provided under this section will be paid wages at rates not less than those prevailing on similar work in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly referred to as the Davis-Bacon Act).

(d) FINANCING TERMS.—(1) Interest on a loan under this section may be a fixed rate or floating rate, and shall be equal to the Federal cost of funds consistent with the loan type and term, minus 1.5 percent.

(2) Interest shall accrue from the date of the loan, but the first payment of interest shall be deferred, if desired by the borrower, for a period ending not later than 3 years after the initial date of operation of the system.

(3) Interest attributable to the period of deferred payment shall be amortized over the remainder of the loan term.

(4) Principal shall be repaid on a schedule established at the time the loan is made. Such payments shall begin

not later than 3 years after the initial date of operation of the system.

(5) Loans made from the SIRF shall be repayable over a period ending not more than 20 years after the date the loan is made.

(6) Loans shall be prepayable at any time without penalty.

(7) SIRF loans shall be subordinate to other loans for the project.

(e) FUNDING CYCLES.—Applications for loans from the SIRF shall be received on a periodic basis at least semiannually.

(f) APPLICATION OF REPAYMENTS FOR DEFICIT REDUCTION.—Loans from the SIRF shall be made, with funds available for this purpose, during the 10 years starting from the date that the first loan from the fund is made. Until this 10-year period ends, funds repaid by borrowers shall be deposited in the SIRF to be made available for additional loans. Once loans from the SIRF are no longer being made, repayments shall go directly into the United States Treasury.

(g) PRIORITIES.—In evaluating projects for funding, priority shall be given to projects which—

(1) maximize energy efficiency;

(2) minimize environmental impacts, including from regulated air pollutants, greenhouse gas emissions, and the use of refrigerants known to cause ozone depletion;

(3) use renewable energy resources;

(4) maximize oil displacement; and

(5) benefit economically-depressed areas.

(h) REGULATIONS.—Not later than one year after the date of enactment of this Act, the Secretary of Energy shall develop a plan and adopt rules and procedures for establishing and operating the SIRF.

(i) PROGRAM REVIEW.—Every two years the Secretary shall report to the Congress on the status and progress of the SIRF.

(j) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section $250,000,000 for fiscal year 2008 and $500,000,000 for each of the fiscal years 2009 through 2012.

SEC. 176. REAUTHORIZATION OF STATE ENERGY PROGRAMS.

Section 365(f) of the Energy Policy and Conservation Act (42 U.S.C. 6325(f)) is amended by striking ''$100,000,000 for each of the fiscal years 2006 and 2007 and $125,000,000 for fiscal year 2008'' and inserting

''$125,000,000 for each of the fiscal years 2007, 2008, 2009, 2010, 2011, and 2012''.

Subtitle G—Energy Savings Performance Contracting

SEC. 181. DEFINITION OF ENERGY SAVINGS.

Section 804(2) of the National Energy Conservation Policy Act (42 U.S.C. 8287c(2)) is amended—

(1) by redesignating subparagraphs (A), (B), and (C) as clauses (i), (ii), and (iii), respectively, and indenting appropriately;

(2) by striking ''means a reduction'' and inserting ''means—

''(A) a reduction'';

(3) by striking the period at the end and inserting a semicolon; and

(4) by adding at the end the following:

''(B) the increased efficient use of an existing energy source by cogeneration or heat recovery, and installation of renewable energy systems;

''(C) if otherwise authorized by Federal or State law (including regulations), the sale or transfer of electrical or thermal energy generated onsite but in excess of Federal needs, to utilities or non-Federal energy users; and

''(D) the increased efficient use of existing water sources in interior or exterior applications.''.

SEC. 182. FINANCING FLEXIBILITY.

Section 801(a)(2) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)(2)) is amended by adding at the end the following:

''(E) SEPARATE CONTRACTS.—In carrying out a contract under this title, a Federal agency may—

''(i) enter into a separate contract for energy services and conservation measures under the contract; and

''(ii) provide all or part of the financing necessary to carry out the contract.''.

SEC. 183. AUTHORITY TO ENTER INTO CONTRACTS; REPORTS.

(a) AUTHORITY TO ENTER INTO CONTRACTS.—Section 801(a)(2)(D) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)(2)(D)) is amended—

(1) in clause (ii), by inserting ''and'' after the semicolon at the end;

(2) by striking clause (iii); and

(3) by redesignating clause (iv) as clause (iii).

(b) REPORTS.—Section 548(a)(2) of the National Energy Conservation Policy Act (42 U.S.C. 8258(a)(2)))

is amended by inserting ''and any termination penalty exposure'' after ''the energy and cost savings that have resulted from such contracts''.

(c) CONFORMING AMENDMENT.—Section 2913 of title 10, United States Code is amended by striking subsection (e).

SEC. 184. PERMANENT REAUTHORIZATION.

Section 801 of the National Energy Conservation Policy Act (42 U.S.C. 8287) is amended by striking subsection (c).

SEC. 185. TRAINING FEDERAL CONTRACTING OFFICERS TO NEGOTIATE ENERGY EFFICIENCY CONTRACTS.

(a) PROGRAM.—The Secretary of Energy shall create and administer in the Federal Energy Management Program a training program to educate Federal contract negotiation and contract management personnel so that such contract officers are prepared to—

(1) negotiate energy savings performance contracts;

(2) conclude effective and timely contracts for energy efficiency services with all companies offering energy efficiency services; and

(3) review Federal contracts for all products and services for their potential energy efficiency opportunities and implications.

(b) SCHEDULE.—The Federal Energy Management Program shall plan, staff, announce, and begin such training not later than one year after the date of enactment of this Act.

(c) PERSONNEL TO BE TRAINED.—Personnel appropriate to receive such training shall be selected by and sent for such training from—

(1) the Department of Defense;

(2) the Department of Veterans Affairs;

(3) the Department of Energy;

(4) the General Services Administration;

(5) the Department of Housing and Urban Development;

(6) the United States Postal Service; and

(7) all other Federal agencies and departments that enter contracts for buildings, building services, electricity and electricity services, natural gas and natural gas services, heating and air conditioning services, building fuel purchases, and other types of procurement or service contracts determined by Federal Energy Management Program to offer the potential for energy savings and greenhouse gas emis-

sion reductions if negotiated with such goals in mind.

(d) TRAINERS.—Such training may be conducted by attorneys or contract officers with experience in negotiating and managing such contracts from any agency, and the Department of Energy shall reimburse their related salaries and expenses from amounts appropriated for carrying out this section to the extent they are not already employees of the Department of Energy. Such training may also be provided by private experts hired by the Department of Energy for the purposes of this section, except that the Department may not hire experts who are simultaneously employed by any company under contract to provide such energy efficiency services to the Federal Government.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy for carrying out this section $750,000 for each of fiscal years 2008 through 2012.

SEC. 186. PROMOTING LONG-TERM ENERGY SAVINGS PERFORMANCE CONTRACTS AND VERIFYING SAVINGS.

Section 801(a)(2) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)(2)) is amended—

(1) in subparagraph (D), by inserting ''beginning on the date of the delivery order'' after ''25 years''; and

(2) by adding at the end the following:

''(F) PROMOTION OF CONTRACTS.—In carrying out this section, a Federal agency shall not—

''(i) establish a Federal agency policy that limits the maximum contract term under subparagraph (D) to a period shorter than 25 years; or

''(ii) limit the total amount of obligations under energy savings performance contracts or other private financing of energy savings measures.

''(G) MEASUREMENT AND VERIFICATION REQUIREMENTS FOR PRIVATE FINANCING.—

''(i) IN GENERAL.—The evaluations and savings measurement and verification required under paragraphs (1) and (3) of section 543(f) shall be used by a Federal agency to meet the requirements for—

''(I) in the case of energy savings performance contracts, the need for energy audits, calculation of energy

savings, and any other evaluation of costs and savings needed to implement the guarantee of savings under this section; and

''(II) in the case of utility energy service contracts, needs that are similar to the purposes described in subclause (I).

''(ii) MODIFICATION OF EXISTING CONTRACTS.—Not later than 180 days after the date of enactment of this subparagraph, each Federal agency shall, to the maximum extent practicable, modify any indefinite delivery and indefinite quantity energy savings performance contracts, and other indefinite delivery and indefinite quantity contracts using private financing, to conform to the amendments made by subtitle G of title I of the [Energy Efficiency Improvement Act of 2007].''.

Subtitle H—Advisory Committee on Energy Efficiency Financing

SEC. 189. ADVISORY COMMITTEE.

(a) ESTABLISHMENT.—The Assistant Secretary of Energy for Energy Efficiency and Renewable Energy shall

establish an advisory committee to provide advice and recommendations to the Department of Energy on energy efficiency finance and investment issues, options, ideas, and trends, and to assist the energy community in identifying practical ways of lowering costs and increasing investments in energy efficiency technologies.

(b) MEMBERSHIP.—The advisory committee established under this section shall have a balanced membership that shall include members representing the following communities:

(1) Providers of seed capital.

(2) Venture capitalists.

(3) Private equity sources.

(4) Investment banking corporate finance.

(5) Investment banking mergers and acquisitions.

(6) Equity capital markets.

(7) Debt capital markets.

(8) Research analysts.

(9) Sales and trading.

(10) Commercial lenders.

(11) Residential lenders.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as may be

necessary to the Secretary of Energy for carrying out this section.

Subtitle I—Energy Efficiency Block Grant Program

SEC. 191. DEFINITIONS.

For purposes of this subtitle—

(1) the term ''eligible entity'' means a State or an eligible unit of local government within a State;

(2) the term ''eligible unit of local government'' means—

(A) a city with a population of at least 50,000; and

(B) a county with a population of at least 200,000;

(3) the term ''Secretary'' means the Secretary of Energy; and

(4) the term ''State'' means one of the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Commonwealth of the Northern Mariana Islands, and any other commonwealth, territory, or possession of the United States.

SEC. 192. ESTABLISHMENT OF PROGRAM.

The Secretary shall establish an Energy Efficiency Block Grant Program to make block grants to eligible entities as provided in this subtitle.

SEC. 193. ALLOCATIONS.

(a) IN GENERAL.—Of the funds appropriated for making grants under this subtitle for each fiscal year, the Secretary shall allocate 70 percent to be provided to eligible units of local government as provided in subsection (b) and 30 percent to be provided to States as provided in subsection (c).

(b) ELIGIBLE UNITS OF LOCAL GOVERNMENT.—The Secretary shall provide grants to eligible units of local government according to a formula giving equal weight to—

(1) population, according to the most recent available Census data; and

(2) daytime population, or another similar factor such as square footage of commercial, office, and industrial space, as determined by the Secretary.

(c) STATES.—The Secretary shall provide grants to States according to a formula based on population, according to the most recent available Census data.

(d) PUBLICATION OF ALLOCATION FORMULAS.—Not later than 90 days before the beginning of any fiscal year in which grants are to made under this subtitle, the Sec-

retary shall publish in the Federal Register the formulas for allocation described in subsection (b)(1) and (b)(2).

SEC. 194. ELIGIBLE ACTIVITIES.

Funds provided through a grant under this subtitle may be used for the following activities:

(1) Development and implementation of an Energy Efficiency Strategy under section 195.

(2) Retaining technical consultant services to assist an eligible entity in the development of such Strategy, including—

(A) formulation of energy efficiency, energy conservation, and energy usage goals;

(B) identification of strategies to meet such goals through efforts to increase energy efficiency and reduce energy consumption;

(C) identification of strategies to encourage behavioral changes among the populace that will help achieve such goals;

(D) development of methods to measure progress in achieving such goals;

(E) development and preparation of annual reports to the citizenry of the eligible entity's energy efficiency strategies and goals, and progress in achieving them; and

(F) other services to assist in the implementation of the Energy Efficiency Strategy.

(3) Conducting energy audits.

(4) Development and implementation of weatherization programs.

(5) Creation of financial incentive programs for energy efficiency retrofits, including zero-interest or low-interest revolving loan funds.

(6) Grants to nonprofit organizations and governmental agencies for energy retrofits.

(7) Development and implementation of energy efficiency programs and technologies for buildings and facilities of nonprofit organizations and governmental agencies.

(8) Development and implementation of building and home energy conservation programs, including—

(A) design and operation of the programs;

(B) identifying the most effective methods for achieving maximum participation and efficiency rates;

(C) public education;

(D) measurement protocols; and

(E) identification of energy efficient technologies.

(9) Development and implementation of energy conservation programs, including—

(A) use of flex time by employers;

(B) satellite work centers; and

(C) other measures that have the effect of increasing energy efficiency and decreasing energy consumption.

(10) Development and implementation of building codes and inspection services for public, commercial, industrial, and single and multifamily residential buildings to promote energy efficiency.

(11) Application and implementation of alternative energy and energy distribution technologies that significantly increase energy efficiency and promote distributed resources and district heating and cooling systems.

(12) Development and promotion of zoning guidelines or requirements that result in increased energy efficiency, efficient development, active living land use planning, and infrastructure such as bike lanes and pathways, and pedestrian walkways.

(13) Promotion of greater participation and efficiency rates for material conservation programs, including source reduction, recycling, and recycled

content procurement programs that lead to increases in energy efficiency.

(14) Establishment of a State, county, or city office to assist in the development and implementation of the Energy Efficiency Strategy.

SEC. 195. REQUIREMENTS.

(a) REQUIREMENTS FOR ELIGIBLE UNITS OF LOCAL GOVERNMENT.—

(1) PROPOSED STRATEGY.—Not later than 1 year after being awarded a grant under this subtitle, an eligible unit of local government shall submit to the Secretary a proposed Energy Efficiency Strategy which establishes goals for increased energy efficiency in the jurisdiction of the eligible units of local government. The Strategy shall include plans for the use of funds received under the grant to assist the eligible unit of local government in the achievement of such goals, consistent with section 194. In developing such a Strategy, an eligible unit of local government shall take into account any plans for the use of funds by adjoining eligible units of local governments funded under this subtitle.

(2) APPROVAL.—The Secretary shall approve or disapprove a proposed Strategy submitted under paragraph (1) not later than 90 days after receiving

it. If the Secretary disapproves a proposed Strategy, the Secretary shall provide to the eligible unit of local government the reasons for such disapproval. The eligible unit of local government may revise and resubmit the Strategy, as many times as required, until approval is granted.

(3) FUNDING FOR PREPARATION OF STRATEGY.—

(A) IN GENERAL.—Until the Secretary has approved a proposed Energy Efficiency Strategy under paragraph (2), the Secretary shall only disburse to an eligible unit of local government $200,000 or 20 percent of the grant, whichever is greater, which may be used only for preparation of the Strategy.

(B) REMAINDER OF FUNDS.—The remainder of an eligible unit of local government's grant funds awarded but not disbursed under subparagraph (A) shall remain available and shall be disbursed by the Secretary upon approval of the Strategy.

(4) LIMITATIONS ON USE OF FUNDS.—Of the amounts provided through a grant under this subtitle, an eligible unit of local government may use—

(A) not more than 10 percent, or $75,000, whichever is greater, for administrative expenses, not including expenses needed to meet reporting requirements under this subtitle;

(B) not more than 20 percent, or $250,000, whichever is greater, for the establishment of revolving loan funds; and

(C) not more than 20 percent, or $250,000, whichever is greater, for subgranting to nongovernmental organizations for the purpose of assisting in the implementation of the Energy Efficiency Strategy.

(5) ANNUAL REPORT.—Not later than 2 years after receipt of the first disbursement of funds from a grant awarded under this subtitle, and annually thereafter, an eligible unit of local government shall submit a report to the Secretary on the status of the Strategy's development and implementation, and, where practicable, a best available assessment of energy efficiency gains within the jurisdiction of the eligible unit of local government.

(b) REQUIREMENTS FOR STATES.—

(1) ALLOCATION OF GRANT FUNDS.—A State receiving a grant under this subtitle shall use at least 70 percent of the funds received to provide

subgrants to units of local government in the State that are not eligible units of local government. The State shall make such subgrant awards not later than 6 months after approval of the State's Strategy under paragraph (3).

(2) PROPOSED STRATEGY.—Not later than 120 days the date of enactment of this subtitle, each State shall submit to the Secretary a proposed Energy Efficiency Strategy which establishes a process for making subgrants described in paragraph (1), and establishes goals for increased energy efficiency in the jurisdiction of the State. The Strategy shall include plans for the use of funds received under a grant under this subtitle to assist the State in the achievement of such goals, consistent with section 194.

(3) APPROVAL.—The Secretary shall approve or disapprove a proposed Strategy submitted under paragraph (2) not later than 90 days after receiving it. If the Secretary disapproves a proposed Strategy, the Secretary shall provide to the State the reasons for such disapproval. The State may revise and resubmit the Strategy, as many times as required, until approval is granted.

(4) FUNDING FOR PREPARATION OF STRATEGY.—

(A) IN GENERAL.—Until the Secretary has approved a proposed Energy Efficiency Strategy under paragraph (2), the Secretary shall only disburse to a State $200,000 or 20 percent of the grant, whichever is greater, which may be used only for preparation of the Strategy.

(B) REMAINDER OF FUNDS.—The remainder of a State's grant funds awarded but not disbursed under subparagraph (A) shall remain available and shall be disbursed by the Secretary upon approval of the Strategy.

(5) LIMITATIONS ON USE OF FUNDS.—Of the amounts provided through a grant under this subtitle, a State may use not more than 10 percent for administrative expenses.

(6) ANNUAL REPORTS.—A State shall annually report to the Secretary on the development and implementation of its Strategy. Each such report shall include—

(A) a status report on the State's subgrant program described in paragraph (1);

(B) a best available assessment of energy efficiency gains achieved through the State's Strategy; and

(C) specific energy efficiency and energy conservation goals for future years.

(c) STATE AND LOCAL ADVISORY COMMITTEE.—

(1) STATE AND LOCAL ADVISORY COMMITTEE.—The Secretary shall establish a State and Local Advisory Committee to provide advice regarding the administration, direction, and evaluation of the program under this subtitle.

SEC. 196. REVIEW AND EVALUATION.

The Secretary may review and evaluate the performance of grant recipients, including by performing audits, and may deny funding to such grant recipients for failure to properly adhere to—

(1) the Secretary's guidelines and regulations relating to the program under this subtitle, including the misuse or misappropriation of funds; or

(2) the grant recipient's Strategy.

SEC. 197. TECHNICAL ASSISTANCE AND EDUCATION PROGRAM.

(a) ESTABLISHMENT.—The Secretary shall establish and carry out a technical assistance and education program to provide—

(1) technical assistance to State and local governments;

(2) public education programs;

(3) demonstration of innovative energy efficiency systems and practices; and

(4) identification of effective measurement methodologies and methods for changing or influencing public participation in, and awareness of, energy efficiency programs.

(b) ELIGIBLE RECIPIENTS.—Eligible recipients of assistance under this section shall include State and local governments, State and local government associations, public and private nonprofit organizations, and colleges and universities.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary for carrying out this section $150,000,000 for each of the fiscal years 2008 through 2012.

SEC. 198. AUTHORIZATION OF APPROPRIATIONS.

(a) GRANTS.—There are authorized to be appropriated to the Secretary for grants under this subtitle, $2,000,000,000 for each of fiscal years 2008 through 2012.

(b) ADMINISTRATION.—There are authorized to be appropriated to the Secretary for administrative expenses of the program established under this subtitle—

(1) $20,000,000 for fiscal year 2008;

(2) $20,000,000 for fiscal year 2009;

(3) $25,000,000 for fiscal year 2010;

(4) $25,000,000 for fiscal year 2011; and

(5) $30,000,000 for fiscal year 2012.

Subtitle J—Green Buildings Retrofit Loan Guarantees

SEC. 199. GREEN BUILDINGS RETROFIT LOAN GUARANTEES.

(a) DEFINITIONS.—In this section:

(1) COST.—The term ''cost'' has the meaning given the term ''cost of a loan guarantee'' within the meaning of section 502(5)(C) of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a(5)(C)).

(2) GUARANTEE.—

(A) IN GENERAL.—The term ''guarantee'' has the meaning given the term ''loan guarantee'' in section 502 of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a).

(B) INCLUSION.—The term ''guarantee'' includes a loan guarantee commitment (as de-

fined in section 502 of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a)).

(3) OBLIGATION.—The term ''obligation'' means the loan or other debt obligation that is guaranteed under this section.

(4) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(b) ELIGIBLE PURPOSES.—Except for division C of Public Law 108–423, the Director shall make loan guarantees under this section for renovation projects that are eligible projects within the meaning of section 1703 of the Energy Policy Act of 2005 and that will result in a building achieving the United States Green Building Council Leadership in Energy and Environmental Design ''certified'' level, or meeting a comparable standard approved by the Director.

(c) TERMS AND CONDITIONS.—

(1) IN GENERAL.—The Director shall make guarantees under this section for projects on such terms and conditions as the Director determines, after consultation with the Secretary of the Treasury, in accordance with this section, including limitations on the amount of any loan guarantee to ensure distribution to a variety of borrowers.

(2) SPECIFIC APPROPRIATION OR CONTRIBUTION.—No guarantee shall be made under this section unless—

(A) an appropriation for the cost has been made; or

(B) the Director has received from the borrower a payment in full for the cost of the obligation and deposited the payment into the Treasury.

(3) LIMITATION.—Not more than $100,000,000 in loans may be guaranteed under this section at any one time.

(4) AMOUNT.—Unless otherwise provided by law, a guarantee by the Director under this section shall not exceed an amount equal to 80 percent of the project cost that is the subject of the guarantee, as estimated at the time at which the guarantee is issued.

(5) REPAYMENT.—No guarantee shall be made under this section unless the Director determines that there is reasonable prospect of repayment of the principal and interest on the obligation by the borrower.

(6) INTEREST RATE.—An obligation shall bear interest at a rate that does not exceed a level that

the Director determines appropriate, taking into account the prevailing rate of interest in the private sector for similar loans and risks.

(7) TERM.—The term of an obligation shall require full repayment over a period not to exceed the lesser of—

(A) 30 years; or

(B) 90 percent of the projected useful life of the building whose renovation is to be financed by the obligation (as determined by the Director).

(8) DEFAULTS.—

(A) PAYMENT BY DIRECTOR.—

(i) IN GENERAL.—If a borrower defaults on the obligation (as defined in regulations promulgated by the Director and specified in the guarantee contract), the holder of the guarantee shall have the right to demand payment of the unpaid amount from the Director.

(ii) PAYMENT REQUIRED.—Within such period as may be specified in the guarantee or related agreements, the Director shall pay to the holder of the guarantee the unpaid interest on, and unpaid

principal of the obligation as to which the borrower has defaulted, unless the Director finds that there was no default by the borrower in the payment of interest or principal or that the default has been remedied.

(iii) FORBEARANCE.—Nothing in this paragraph precludes any forbearance by the holder of the obligation for the benefit of the borrower which may be agreed upon by the parties to the obligation and approved by the Director.

(B) SUBROGATION.—

(i) IN GENERAL.—If the Director makes a payment under subparagraph (A), the Director shall be subrogated to the rights of the recipient of the payment as specified in the guarantee or related agreements including, where appropriate, the authority (notwithstanding any other provision of law) to—

(I) complete, maintain, operate, lease, or otherwise dispose of any property acquired pursuant to such guarantee or related agreements; or

(II) permit the borrower, pursuant to an agreement with the Director, to continue to pursue the purposes of the project if the Director determines this to be in the public interest.

(ii) SUPERIORITY OF RIGHTS.—The rights of the Director, with respect to any property acquired pursuant to a guarantee or related agreements, shall be superior to the rights of any other person with respect to the property.

(iii) TERMS AND CONDITIONS.—A guarantee agreement shall include such detailed terms and conditions as the Director determines appropriate to—

(I) protect the interests of the United States in the case of default; and

(II) have available all the patents and technology necessary for any person selected, including the Director, to complete and operate the project.

(C) PAYMENT OF PRINCIPAL AND INTEREST BY DIRECTOR.—With respect to any obliga-

tion guaranteed under this section, the Director may enter into a contract to pay, and pay, holders of the obligation, for and on behalf of the borrower, from funds appropriated for that purpose, the principal and interest payments which become due and payable on the unpaid balance of the obligation if the Director finds that—

(i)(I) the borrower is unable to meet the payments and is not in default;

(II) it is in the public interest to permit the borrower to continue to pursue the purposes of the project; and

(III) the probable net benefit to the Federal Government in paying the principal and interest will be greater than that which would result in the event of a default;

(ii) the amount of the payment that the Director is authorized to pay shall be no greater than the amount of principal and interest that the borrower is obligated to pay under the agreement being guaranteed; and

(iii) the borrower agrees to reimburse the Director for the payment (including interest) on terms and conditions that are satisfactory to the Director.

(D) ACTION BY ATTORNEY GENERAL.—

(i) NOTIFICATION.—If the borrower defaults on an obligation, the Director shall notify the Attorney General of the default.

(ii) RECOVERY.—On notification, the Attorney General shall take such action as is appropriate to recover the unpaid principal and interest due from—

(I) such assets of the defaulting borrower as are associated with the obligation; or

(II) any other security pledged to secure the obligation.

(9) FEES.—

(A) IN GENERAL.—The Director shall charge and collect fees for guarantees in amounts the Director determines are sufficient to cover applicable administrative expenses.

(B) AVAILABILITY.—Fees collected under this paragraph shall—

(i) be deposited by the Director into the Treasury; and

(ii) remain available until expended, subject to such other conditions as are contained in annual appropriations Acts.

(10) RECORDS; AUDITS.—

(A) IN GENERAL.—A recipient of a guarantee shall keep such records and other pertinent documents as the Director shall prescribe by regulation, including such records as the Director may require to facilitate an effective audit.

(B) ACCESS.—The Director and the Comptroller General of the United States, or their duly authorized representatives, shall have access, for the purpose of audit, to the records and other pertinent documents.

(11) FULL FAITH AND CREDIT.—The full faith and credit of the United States is pledged to the payment of all guarantees issued under this section with respect to principal and interest.

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A BILL

To promote greater energy efficiency.

AUGUST 3, 2007

Committees on Transportation and Infrastructure and Oversight and Government Reform discharged; committed to the Committee of the Whole House on the State of the Union and ordered to be printed